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OFFICE OF STRATEGIC SERVICES

Research and Analysis Branch

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POSTAL AND TELECOMMUNICATIONS SERVICES IN AUSTRIA

DEPARTMENT OF STATE
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Description

Basic information on administration, distribution and type of civilian communications systems in pre-Anschluss and present-day Austria.

15 November 1944

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SUMMARY CONFIDENTIAL

Before the Anschluss the civilian communications organization in Austria was supervised by the Generaldirektion für die Post- und Telegraphenverwaltung, a semi-independent bureau under the Minister of Trade and Communications. The Generaldirektion consisted of twelve service divisions and two central offices, and was headed by the Generaldirektor.

Directly subordinate to the Generaldirektion were four central technical service offices. Local administration was carried out by postal and telegraph districts and their local operating offices. Total PTT employees in 1935 numbered 26,373, of which 20,542 ranked as Beamte. After the Anschluss all functions of the Generaldirektion were taken over by the Reichspost and lines of authority redirected to Berlin. Local administration remained almost unchanged.

The Austrian telephone system constituted by far the most important part of the telecommunication services, ranking second only to the combined postal services as a source of income for the PTT. Station equipment was largely concentrated in the federal state of Vienna -- 184,840 out of 272,139 total telephones in Austria, or an average of 9.86 as against 4.03 per hundred population.

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In automatization the postal and telegraph district Vienna was also far in advance of the rest of the country, with an average of 72 percent automatization of telephone exchanges, the other districts averaging less than .5 percent. A German concession was responsible for the good condition of line equipment throughout Austria. All long-distance line was laid in underground cable.

Telegraph services were secondary to those of the telephone though public facilities were available throughout the country. Teletype constituted the most important telegraphic advance and was just coming into use at the time of the Anschluss. There was one facsimile installation in Vienna.

Radio services were operated by two mixed-ownership joint-stock enterprises: 1) RAVAG having a monopoly of broadcasting and domestic radio-telephony and radiotelegraphy services; and 2) Radio-Austria, AG controlling Austria's international radio-telegraph business. After the Anschluss all radio services were taken over by the Reichspost.

The Austrian Post in addition to providing general postal services, similar to those of the United States (letter post and parcel post), also handled some special money services such as money letters, postal money orders and government checks. Newspaper subscriptions and deliveries were furnished by the postal services.

The Austrian Post depended upon railways, motor vehicles and air transport for the major part of postal transportation. However, in certain districts which were not served by these public facilities the Post provided a Kraftpost or motor transport system which carried passengers as well as mail.

The Postal banking system was operated independently of the Austrian PTT but is included here because it used PTT office facilities and because after the Anschluss it was incorporated into the postal services of the German Reichspost. This Postal banking system offered two services: 1) postal savings, and 2) postal checking. After German occupation the postal checking service was separated from the bank and merged with the German postal checking system. Only the postal savings service continued to be administered by the Österreichische Postsparkasse (Austrian Postal Bank). The latter system was extended throughout Greater Germany but headquarters were maintained in Vienna.

In 1938, except for the specific changes mentioned above, the Austrian postal and telecommunications services were taken over intact by the German Reichspost. Unless otherwise indicated, statistics given are the latest available figures for pre-Anschluss Austria. There is an appendix of post-Anschluss statistical tables at the end of this report arranged in the general order followed by the main body of the text.

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I. ADMINISTRATION (See Chart 1.)

A. The Generaldirektion

Before the Anschluss the civilian communications system of Austria was operated by the Generaldirektion für die Post- und Telegraphenverwaltung, a semi-independent bureau under the Minister of Trade and Communications. In contrast to the German organization in which the postal and telecommunications services were directed by a separate ministry (the Reichspostministerium) and where the director was a cabinet minister, the Austrian Generaldirektion was only one of several independent offices, councils, and commissions subordinate to the Minister of Trade and Communications, but independent of the Ministry. Its Generaldirektor (Postmaster General) was a civil servant appointed by and responsible only to the Minister. His own authority within the Generaldirektion was absolute but in political circles his stature was decidedly inferior to that of his counterpart in Berlin, the Reichspostminister.

The Generaldirektion was thus a ministry in form and function but not in rank (Chart 2). It was composed of twelve service divisions (Abteilungen) which were administered in three groups of four each. Although there was no clear distinction of function, the first group was concerned largely with personnel; the second, with the post; and the third, with telephone and telegraph. The first and third groups were administered by section chiefs (Sektion Chefs), the second by the Generaldirektor himself who apparently was promoted from the position of section chief but retained at the same time the latter's function.

In addition to these twelve service divisions were two central offices within the Generaldirektion: 1) a bookkeeping office (Buchhaltungstelle), and 2) an accounting office (Post-Fachprüfungsstelle).

All these functions of the Generaldirektion were housed in the central administration building in Vienna, Postgasse 8-10. The dead letter office for all Austria was also located in this building.

Radio and postal savings services were operated independently of the general PTT[1] organization. (See Sections IV and V).

B. Central Servicing Offices (Dienststellen)

Outside the actual structure of the Generaldirektion but entirely dependent upon it were four central servicing offices, also located in Vienna, for the administration of technical matters: 1) Postzeugverwaltung for postal equipment, 2) Telegraphenzeugverwaltung for telegraph equipment, 3) Postkraftfahrleitung, headquarters for postal rolling stock, and 4) Postkraftwagenwerkstätte, repair shop for postal vehicles. In 1935 the last two offices were abolished and all technical affairs of postal vehicles reorganized into one office, Postkraftzeugverwaltung. General administrative affairs and traffic regulations were turned over to the postal administration sections of the local postal and telegraph districts.

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[1] Abbreviation for Post, Telegraph and Telephone.

In 1938 all affairs of postal vehicles were again reorganized and centralized, this time into a separate group forming part of the Generaldirektion but apparently responsible directly to the Minister of Trade and Communications. This new group (Österreichische Kraftpost) has not been included in Table 1 of the general administrative hierarchy because of lack of information concerning its position and because the new group was in existence only for a few months prior to the Anschluss.

C. Local Authorities

1. Postal and Telegraph Districts. The postal and telegraph district (Post und telegraphendirektion) was the basic unit of local administration. Although there were only five such geographical districts in pre-Anschluss Austria, there were six administrative offices (Chart 3) because Vienna's postal functions were separated from those of the telegraph and telephone. This was probably due not

only to the larger volume of business in the capital city but also to the fact that in addition to its other services, the telegraph administration in Vienna handled the Rohrpost (pneumatic mail) construction and was responsible for the central cable construction section.

The normal functional division of a postal and telegraph district office was threefold: (1) administration, (2) bookkeeping, and (3) maintenance and construction of lines. The latter section (Bausektion) was usually sub-divided into one telephone and several telegraph territorial units. The districts of Innsbruck and Klagenfurt, however, had no telephone units.

2. Operating Offices. The actual operations of the communications services were carried out by two groups of local offices: (1) those which dealt directly with the public, and (2) those which dealt only with district headquarters or performed strictly technical services.

The first group included: (1) post and telegraph offices (Post- und Telegraphenämter, which handled postal and telegraph and sometimes telephone services), (2) post offices (Postämter -- postal services only), (3) telegraph offices (Telegraphenämter -- telegraph services only), (4) railway telegraph offices (Eisenbahntelegraphenstationen -- telegraph services only), (5) telephone offices (Fernsprechämter -- telephone services only), (6) contractual telephone offices (Vertragliche Fernsprechämter -- private telephone offices which had contracts with the PTT to handle telegraph services), and (7) postal agencies (Postablagen). A postal agency usually consisted of one agent, who might be assisted by his wife. These agents were responsible for the handling of postal (and sometimes telegraph and telephone) services in rural localities with no post offices. They were not civil servants and are not to be confused with mail carriers who actually distributed and collected mail. (See Table 1 for number and type of these offices.)

Group 2 consisted of: (1) supply offices for the accounting of (money and) material ((Geld und) Materialverrechnungsstellen); and (2) repeater stations (Verstärkerämter). (See Map No. A-5374 for location of repeater stations in Austria.) Construction offices were handled by the district rather than by local authorities (see preceding section).

D. Lines of Authority

With the exception of the semi-independent radio concessions, the Austrian communications system was highly centralized. The Generaldirektion was top heavy with executive duties in addition to its staff functions. The local administrative units -- the postal and telegraph districts -- were independent in structure but not in authority. This structure was utilized by the Germans in the reorganization of the PTT after the Anschluss. The upper half of the administrative hierarchy - the Generaldirektion - was dissolved without disturbing the existence of the local districts. All functions of the Generaldirektion were taken over by the Reichspostministerium and lines of authority redirected to Berlin.[1] The postal and telegraph districts (with the exception of those changes listed below) were simply incorporated into the Reichspost and reclassified as Reich postal districts. In practice these districts gained considerable independence in matters of local authority because the German Reichspostministerium was purely a policy-making body.

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[1] At the time of the Anschluss the Reichspost also took over the state printing press (Staatsdruckerei) in Vienna, although previously it had had no relation to the work of the Generaldirektion.

The most important change in administrative structure was the combination of the Vienna postal district and the Vienna telegraph district into one district. Minor changes in the five district areas were as follows:

Name of PTT district	Austrian area	German area
Vienna	Vienna Nieder-Österreich	Vienna Niederdonau-(Nieder-Österreich and northern and central Burgenland)
Graz	Steiermark	Steiermark (except Aussee but **including** southern Burgenland)
Innsbruck	Tirol Vorarlberg	Vorarlberg northern Tirol
Klagenfurt	Kärnten	Kärnten eastern Tirol
Linz	Salzburg Oberösterreich	Salzburg Oberdonau (Oberösterreich and Aussee)

The various operating offices under the districts were also presumably taken over intact.[1]

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[1] Unless otherwise indicated, statistics given are the latest available figures for pre-Anschluss Austria. At the end of the report however, there is an appendix of post-Anschluss statistical tables arranged in the general order followed by this text.

E. Fiscal and Budgetary Matters

The fiscal year in pre-Anschluss Austria dated from 1 January to 31 December. After the Anschluss the fiscal year was changed to conform with German administration: 1 April to 31 March.

Each of the postal and telegraph districts had its own bookkeeping sections and separate cashiers through whom all accounts were recorded (Chart 3). Financial reports were sent directly to Vienna, to the central bookkeeping and accounting offices of the Generaldirektion. See Table 2 for financial statement of the year 1935. The percentage of PTT income derived in 1936 from the various services was as follows:

Postal services	54%
Telegraph services	02%
Telephone services	34%
Postal Transport services	03%
Postal Savings services	03%
Radio services	01%
Others	03%
	100%

Postal savings and radio funds were administered independently. Rental and license fees, however, were included in the general revenues.

F. Personnel

1. Civil Servants. Before the Anschluss, the majority of all employees of the Austrian PTT were under civil service regulations. The higher-grade employees

were graduates either of a law school or of a technical university. Lower-grade employees had to pass tests before entering upon, and on completion of, the special training courses provided by the Generaldirektion.

In 1935, there were 20,542 civil servants (Beamte) including those civil servants on probation (Beamtenanwärter) and those on temporary retirement. Of this total number 15 percent were somen. In addition there were 944 part-time civil servants and 982 manual workers under civil service. For a statistical summary of the types and number of civil servants employed by the PTT at the end of 1936 see Table 3 at the end of this section.

2. Other Employees. Many statutory positions were not filled by civil servants, but by employees under special government contract (not to be confused with Austrian civil service appointment). They were under more or less temporary appointment. In 1935, there were, under such special contracts, 1,345 men and women in full-time work and 1,426 in part-time or seasonal work.

Additional help was sometimes hired under strictly private contract by the heads of some post and telegraph offices who had lump sums at their disposal. There were 550 such employees in 1935.

Managers of the Postablagen may be regarded as private business men acting as agents of the PTT since they neither received a fixed salary nor kept regular office hours. In 1935, there were 584 managers. They received a percentage of the income derived from the sale of stamps.

3. Effects of the Anschluss. Before the Anschluss, virtually all the lower-grade employees of the PTT were organized in either social-democratic or christian-socialist trade unions. Therefore, many of them, particularly those most active in union affairs, were dismissed or retired when the Nazis assumed control of the country. Among the higher ranks of PTT employees the turnover was much less pronounced, since many of these men had been thoroughly nazified before the Anschluss.

The total number of PTT employees was increased tremendously after the Anschluss. (For a statistical summary of the number of Reichspost employees in Austria, 31 March 1939, see Table III in appendix.) This increase may be explained in part by the following facts:

1) Under the Nazi regime the two radio enterprises which had previously been operated independently were incorporated into the PTT, with a resultant transfer of personnel.

2) With the Anschluss, the personnel of the postal banking services, which had been under the jurisdiction of the Ministry of Finance, was now transferred to the PTT.

3) Before the advent of the Nazis, the Austrian postal service had been understaffed. Under the Nazis, these positions were filled and more created. For political reasons, personnel was often stuffed into offices already adequately staffed.

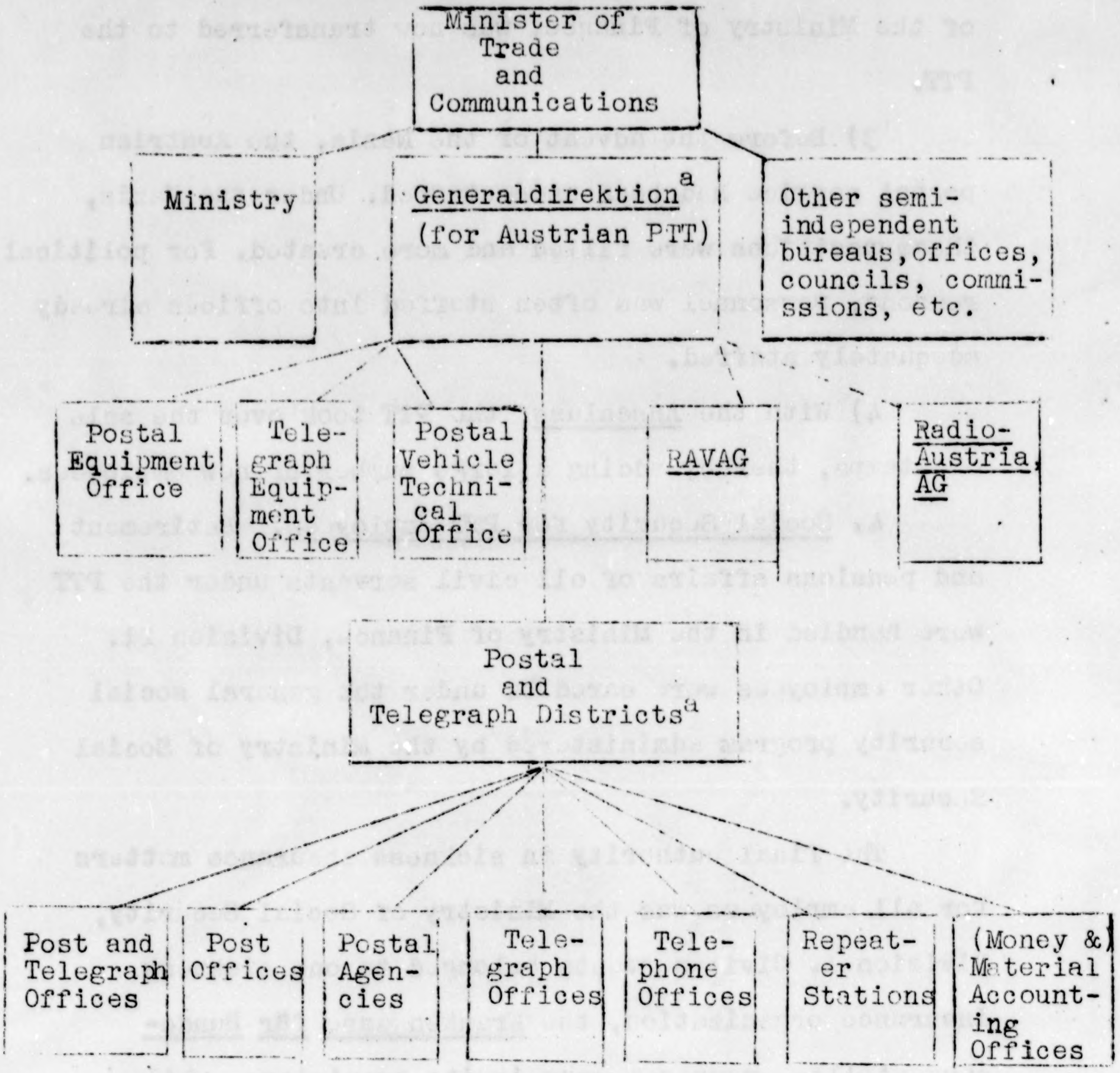
4) With the Anschluss, the PTT took over the sale of stamps, thereby adding a large number of new employees.

4. Social Security for PTT Employees. Retirement and pensions affairs of all civil servants under the PTT were handled in the Ministry of Finance, Division 21. Other employees were cared for under the general social security program administered by the Ministry of Social Security.

The final authority in sickness insurance matters for all employees was the Ministry of Social Security, Division 1. Civil servants belonged to one sickness insurance organization, the Krankenkasse für Bundesangestellte, very generous in its provisions, while other employees were cared for by general sickness insurance organizations -- in this case, the Gebietskrankenkassen.

Chart I.

ADMINISTRATIVE HIERARCHY OF THE AUSTRIAN PTT 1938


Minister of Trade and Communications
Ministry
Generaldirektion[a] (for Austrian PTT)
Other semi-independent bureaus, offices, councils, commissions, etc.
Postal Equipment Office
Telegraph Equipment Office
Postal Vehicle Technical Office
RAVAG
Radio-Austria AG
Postal and Telegraph Districts[a]
Post and Telegraph Offices
Post Offices
Postal Agencies
Telegraph Offices
Telephone Offices
Repeater Stations
(Money & Material Accounting Offices

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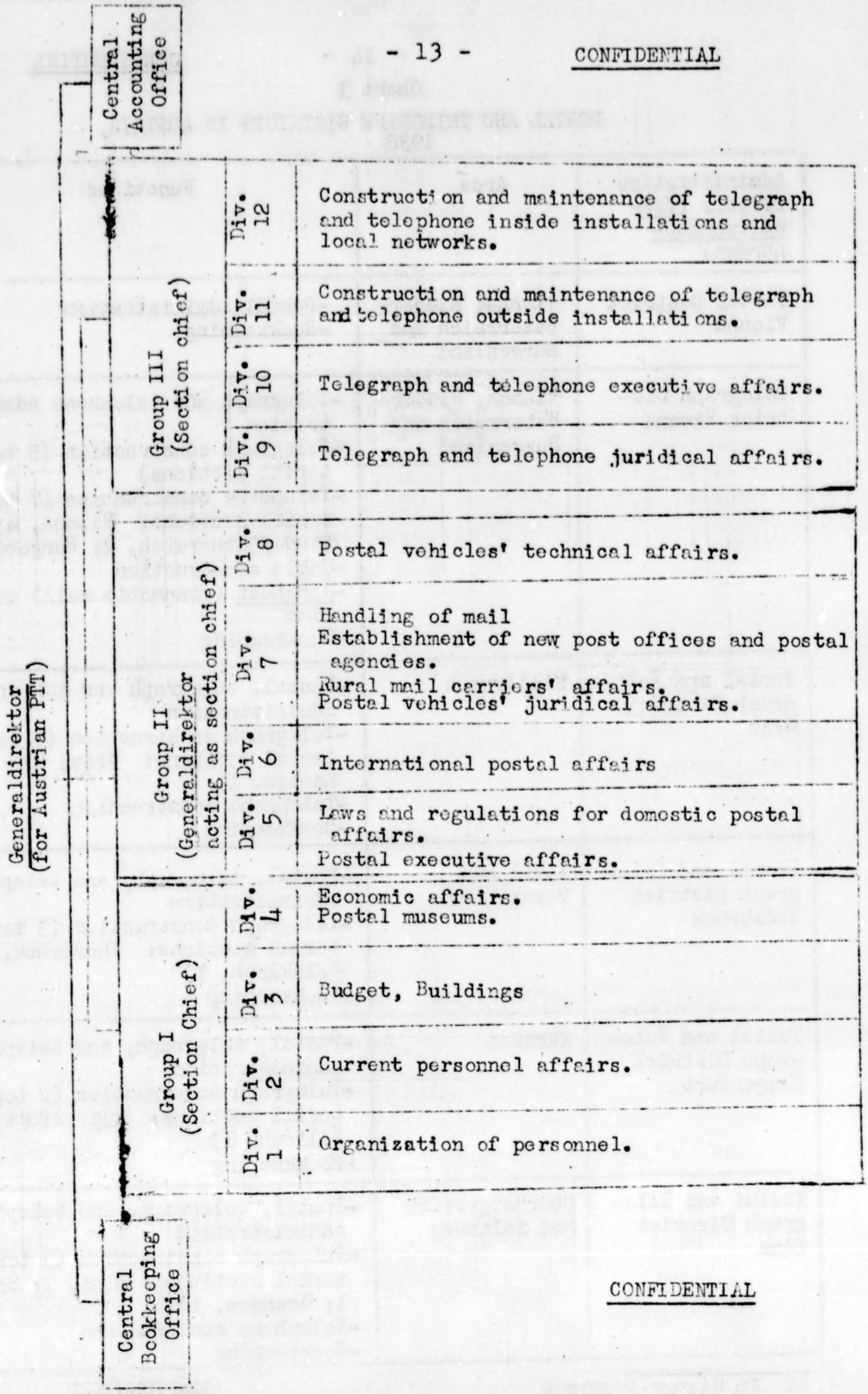
a. See Charts 2 and 3 for subdivisions of Generaldirektion and Postal and Telegraph Districts.

Chart 2
GENERALDIREKTION FOR AUSTRIAN PTT


Generaldirektor (for Austrian PTT)
Central Accounting Office
Central Bookkeeping Office

Group	Div.	Functions
Group I (Section Chief)	Div. 1	Organization of personnel.
	Div. 2	Current personnel affairs.
	Div. 3	Budget, Buildings
	Div. 4	Economic affairs. Postal museums.
Group II (Generaldirektor acting as section chief)	Div. 5	Laws and regulations for domestic postal affairs. Postal executive affairs.
	Div. 6	International postal affairs
	Div. 7	Handling of mail Establishment of new post offices and postal agencies. Rural mail carriers' affairs. Postal vehicles' juridical affairs.
	Div. 8	Postal vehicles' technical affairs.
Group III (Section chief)	Div. 9	Telegraph and telephone juridical affairs.
	Div. 10	Telegraph and telephone executive affairs.
	Div. 11	Construction and maintenance of telegraph and telephone outside installations.
	Div. 12	Construction and maintenance of telegraph and telephone inside installations and local networks.

Chart 3

POSTAL AND TELEGRAPH DISTRICTS IN AUSTRIA, 1938

Administrative Offices (Verwaltungsbehörden)	Area	Functions
Postal District Vienna	Vienna, Niederösterreich and Burgenland	-Postal administration -Bookkeeping
Telegraph District Vienna	Vienna, Niederösterreich and Burgenland	-Telegraph and telephone administration -Telegraph construction (5 territorial sections) -Telephone construction (7 territorial sections: Vienna, 4; Niederösterreich, 2; Burgenland,[a] 1). -Cable construction -Rohrpost (pneumatic mail) construction -Bookkeeping
Postal and Telegraph District Graz	Steiermark	-Postal, telegraph and telephone administration -Telegraph construction (3 territorial sections: Graz, 2; Leoben, 1) -Telephone construction -Bookkeeping
Postal and Telegraph District Innsbruck	Tirol and Vorarlberg	-Postal, telegraph, and telephone administration -Telegraph construction (3 territorial sections: Innsbruck, 2; Feldkirch, 1) -Bookkeeping
Postal and Telegraph District Klagenfurt	Kärnten	-Postal, telegraph, and telephone administration -Telegraph construction (2 territorial sections: Klagenfurt, 1; Villach, 1) -Bookkeeping
Postal and Telegraph District Linz	Oberösterreich and Salzburg	-Postal, telegraph, and telephone administration -Telegraph construction (3 territorial sections: Linz, 1; Salzburg, 1; Gmunden, 1) -Telephone construction -Bookkeeping

[a] In Wiener-Neustadt

Table 1

POSTAL AND TELECOMMUNICATIONS OFFICES IN AUSTRIA, 1935

Type of Office	No. of offices
Post and telegraph offices with telephone service (Post- und Telegraphenämter mit Fernsprechdienst)	2,057
Post and telegraph offices without telephone service (Post- und Telegraphenämter ohne Fernsprechdienst)	26
Post Offices without telegraph and telephone service (Postämter ohne Telegraphen- und Fernsprechdienst)	68
Postal agency with telegraph and telephone service (Postablagen mit Telegraphen- und Fernsprechdienst)	189
Postal agency without telegraph and telephone service (Postablagen ohne Telegraphen- und Fernsprechdienst)	392
Telegraph offices (telegraph service only) (Telegraphenämter)	9
Railway telegraph offices (Eisenbahntelegraphenstationen)	708
Private telegraph offices (Privattelegraphenstationen)	1
Telephone offices (telephone service only) (Fernsprechämter)	24
Contractual telephone offices with telegraph service (Vertragliche Fernsprechämter mit Telegraphendienst)	817
Total PTT offices in Austria	4,291

Table 2. FINANCIAL STATEMENT, 1935
(closing cash account)

Expenditures	Schillings (S)[a]
1. For personnel:	
a) in active service	107,316,481.20
b) retired on pension or for widows and orphans receiving pensions	49,990,070.63
SUBTOTAL 1	157,306,551.83
2. For material and services:	
a) general management	16,340,526.96
b) power current, charge current, coal	709,098.12
c) materials for construction and operation	5,590,063.04
d) tools and implements	123,697.15
e) maintenance of furniture and office equipment	1,689,564.10
f) other maintenance for telegraph and telephone equipment	487,366.67
g) maintenance of buildings, machines, and other operating equipment	1,101,061.38
h) rolling stock of the post	219,986.11
i) liability insurance (Haftpflichtversicherung) for the bus service	160,197.87
j) indemnity to the Federal Railway for the transport of mail	12,005,10000
k) interest and amortization of the German advance payment for the long-distance cable	3,845,217.77
l) interest and amortization of the costs of investments 1924-1934	27,008,012.39
SUBTOTAL 2	69,817,779.34
Minus contributions of interested persons	565,800.95
Final SUBTOTAL 2	69,251,978.39
2A. Current investments	598,728.95
Minus contributions of interested persons	96,474.24
Final SUBTOTAL 2A	502,254.71
TOTALS (2 plus 2A)	69,754,233.10
GRAND TOTAL	227,060,784.93

Revenues	Schillings (S)
1. Fees	195,504,131.76
2. Transport of passengers and freight on post autobusses	5,237,727.08
3. Sales	170,702,54
4. Indemnity from the Postal Savings Bank	7,500,000.00
5. Contributions for pensions	2,072,529.71
6. Refunds for advances on salaries	455,155.71
7. Diverse revenues	2,462,678.82
TOTAL	213,402,925.62
BALANCE: DEFICIT	13,657,859.31
GRAND TOTAL	227,060,784.93

[a] The Austrian Schilling (S) equals 100 Groschen (g). In 1935, it was worth 18,916 cents and was exchanged at a rate of 3S to 2 RM in 1938, though the exchange rate of Reichsmark to dollar was about 40 RM for 1 dollar.

Table 3. CIVIL SERVANTS (BEAMTE AND BEAMTENANWÄRTER) EMPLOYED BY THE AUSTRIAN PTT, 1936[a]

Civil Service Rank (and salary)	Functions of personnel	General-direction & central servicing offices		Postal and telegraph district								Postal district Vienna		Telegraph district Vienna		Totals		Group totals	Per-centage
				Graz		Innsbruck		Klagenfurt		Linz									
		Male	Female	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
8	Higher administrative service (Höherer Verwaltungsdienst)	37	-	27	-	20	-	8	-	30	-	64	-	15	-	201	-		
	Higher clerical service (Höherer technischer Dienst)	31	-	19	-	16	-	11	-	24	-	5	-	86	-	192	-	394	2.10
	Higher technical service (Höherer Fachdienst)	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
7	Administrative service (Verwaltungsdienst)	37	8	25	1	20	-	8	7	36	3	55	11	48	11	229	41		
	Accounting (Rechnungsdienst)	150	31	36	6	25	1	15	2	41	6	86	11	107	41	460	98		
	Intermediate clerical service (Mittlerer technischer Dienst)	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	7486	39.87
	Technical service (Fachtechnischer Dienst)	58	11	321	271	270	166	148	111	559	290	1672	712	325	1073	3353	2634		
	Construction and maintenance (III) (Bau- und Erhaltungsdienst)	7	-	41	-	13	-	9	-	42	-	-	-	557	-	669	-		

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[a] In addition to the civil servants there was a total of 1194 in temporary retirement -- i.e. those who could be recalled into active service at any time. They could be advanced in position and salary during periods of retirement.

Table 3. (contd.)

Civil Service Rank(and salary)	Functions of personnel	General-direction & central servicing offices		Postal and telegraph district								Postal district Vienna		Telegraph district Vienna		Totals		Group totals	Percentage
				Graz		Innsbruck		Klagenfurt		Linz									
		Male	Female	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
6	Garage and machine service (foremen) (Garage- und Maschinemeisterdienst)	5	-	5	-	7	-	3	-	7	-	25	-	-	-	52	-	345	1.84
	Long-distance telephone service (Reiner Fernsprechvermittlungsdienst)	-	-	-	4	-	-	-	-	-	-	-	1	-	58	-	63		
	Construction and maintenance II (Bau- und Erhaltungsdienst II)	2	-	19	-	13	-	10	-	22	-	1	-	104	-	171	-		
	Pneumatic post service II (Rohrpostmaschinendienst II)	-	-	-	-	-	-	-	-	-	-	-	-	8	-	8	-		
	Electrical engineering (Elektromaschinendienst)	-	-	2	-	5	-	2	-	6	-	-	-	36	-	51	-		

Due to its large size, the following document has been filmed in segments. The order of the segments is as follows: left to right, top to bottom.

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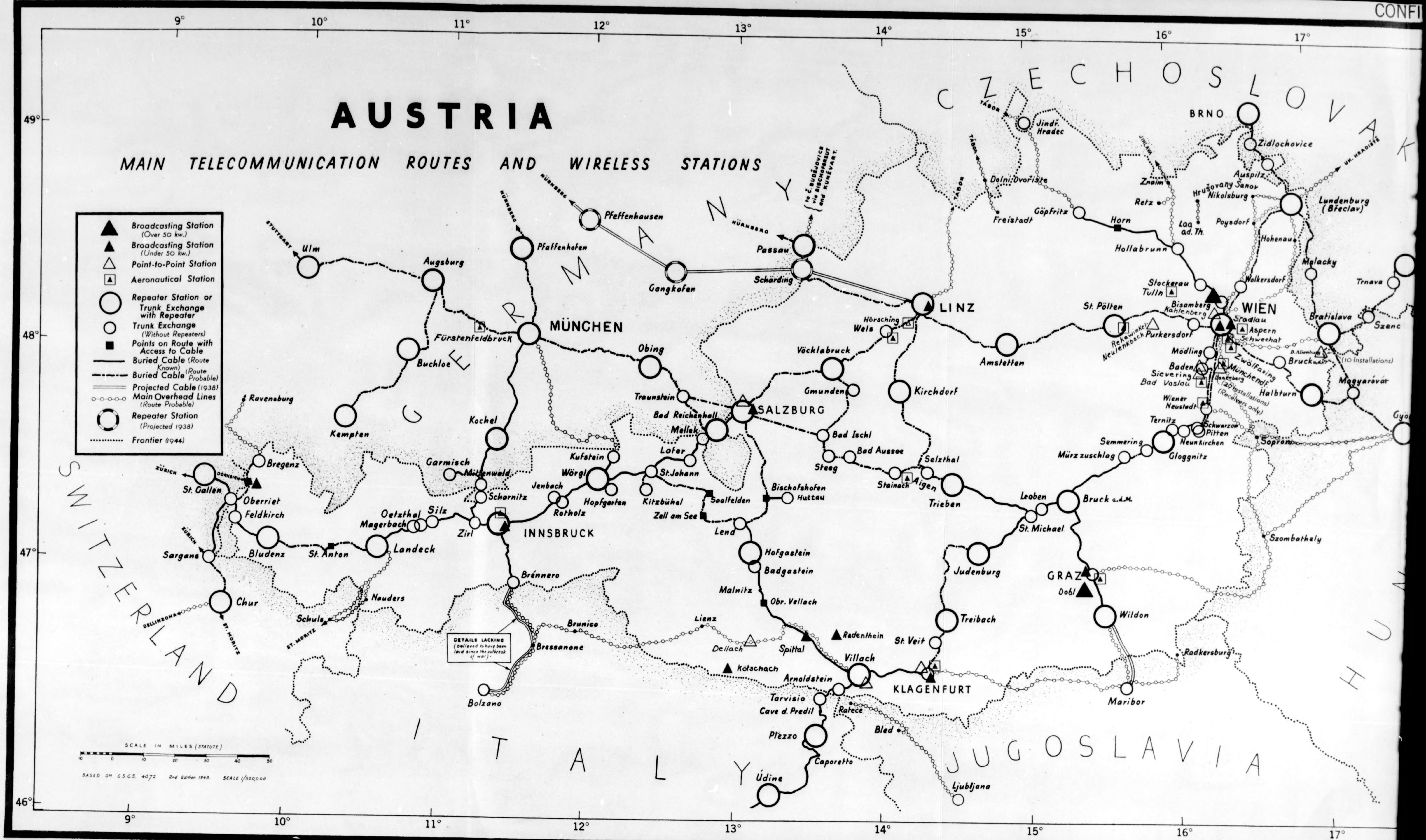
MAIN TELECOMMUNICATION ROUTES AND WIRELESS STATIONS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Rekawinkel
Neulenbach
Purkersdorf
Mödling
Baden
Sievering
Bad Vöslau
Zwölfaxing
Münchendf. (25 Installations) (Receivers only)
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Bruck
(10 Installations)
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Wiener Neustadt
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Bellinzona
St. Moritz
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Nauders
Brennero
Brunico
Bressanone
Bolzano
DETAILS LACKING (believed to have been laid since the outbreak of war)
MÜNCHEN
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Kempten
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Augsburg
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Stuttgart
Pfaffenhofen
Pfeffenhausen
Nürnberg
Gangkofen
Passau
Schärding
Tabor
(to Č. Budějovice via Bischofsrut and Kunžvart)
Jihlava
Uh. Hradiště
SCALE IN MILES (STATUTE)
10 0 10 20 30 40 50
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NO. A-5374—R & A, OSS
15 SEPTEMBER 1944

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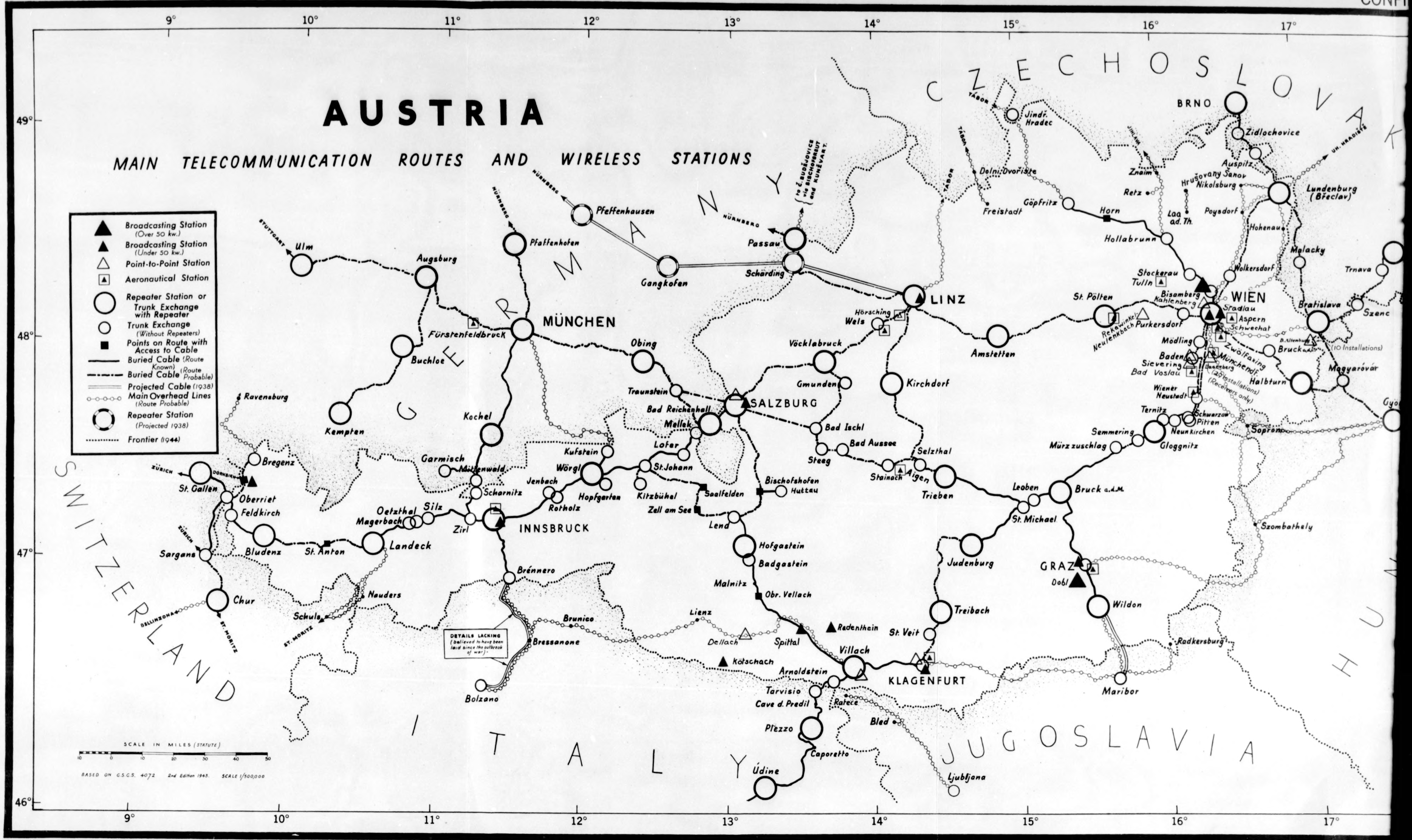
MAIN TELECOMMUNICATION ROUTES AND WIRELESS STATIONS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Dolni Dvořiště
Jindř. Hradec
TABOR
UH. HRADISTE
Gyö
STUTTGART
NÜRNBERG
ZÜRICH
DORNBIRN
BELLINZONA
ST. MORITZ
to Č. BUDĚJOVICE via BISCHOFSREUT and KUNŽVART
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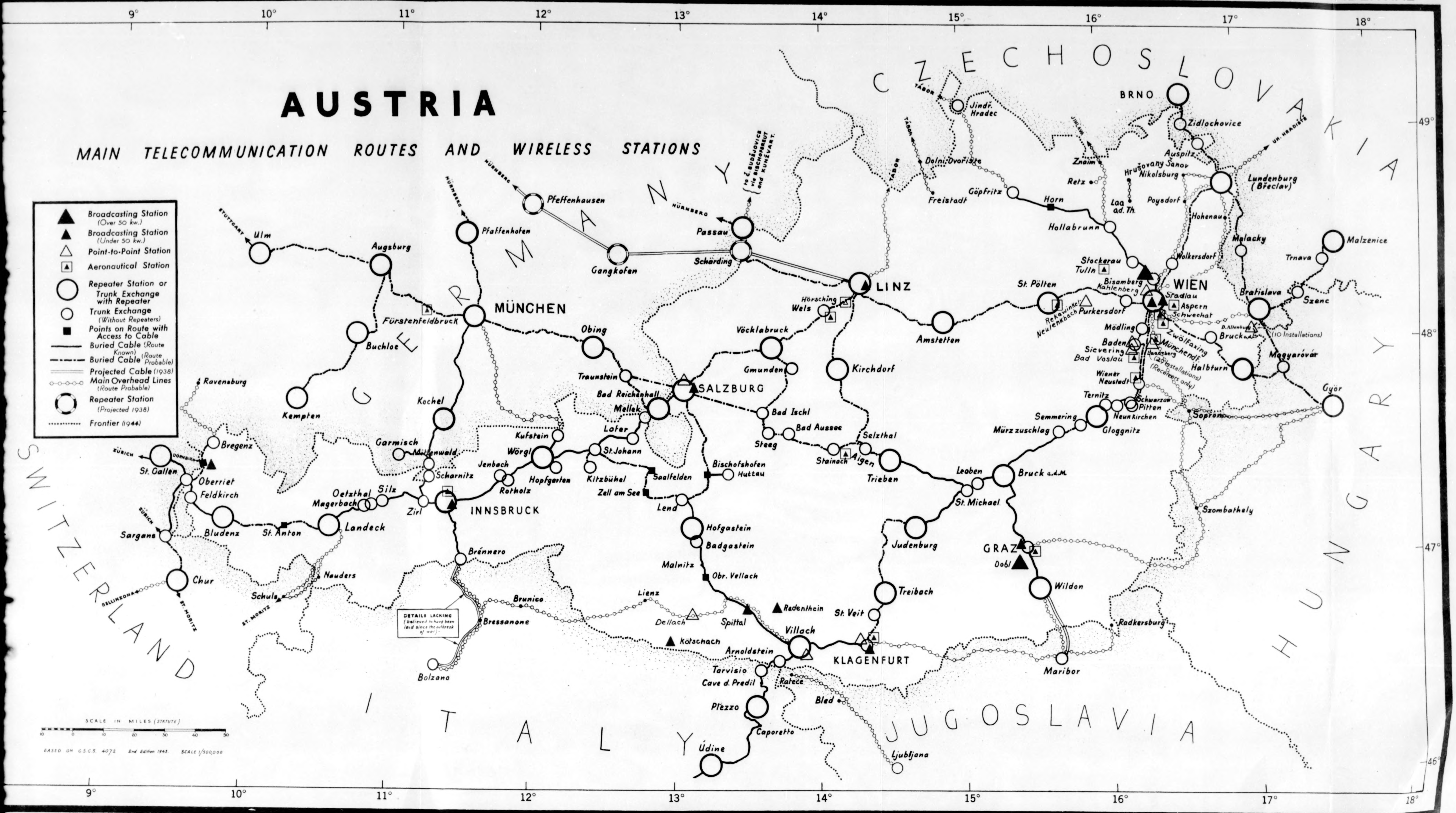
MAIN TELECOMMUNICATION ROUTES AND WIRELESS STATIONS



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Bregenz
Ravensburg
St. Gallen
Sargans
Chur
Nauders
Schuls
Brennero
Bressanone
Brunico
Bolzano
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Lienz
Dellach
Kötschach
Spittal
Radenthein
Villach
Arnoldstein
Tarvisio
Cave d. Predil
Plezzo
Caporetto
Údine
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Bled
Ljubljana
Saalfelden
Zell am See
Bischofshofen
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Münchendorf (25 installations) (Receivers only)
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Szenc
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D. Altenburg
(10 Installations)
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Györ
Sopron
Szombathely
Nürnberg
Stuttgart
Zürich
Dornbirn
Bellinzona
St. Moritz
Uh. Hradište
Jihlava
via Č. Budějovice via Bischofsreut and Kunzvart
SCALE IN MILES (STATUTE)
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BASED ON G.S.G.S. 4072 2nd Edition 1943. SCALE 1/500,000

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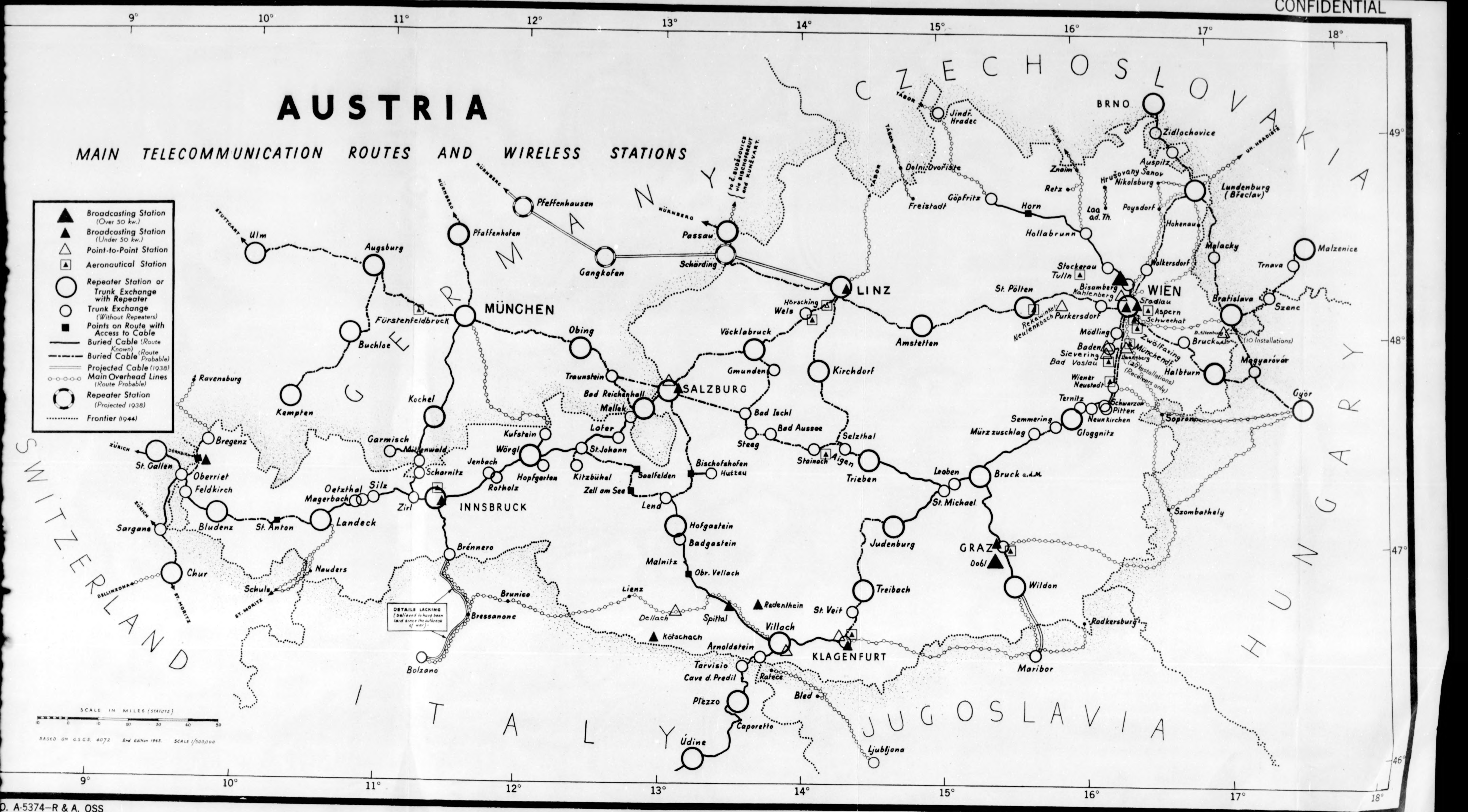
MAIN TELECOMMUNICATION ROUTES AND WIRELESS STATIONS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STUTTGART
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SEPTEMBER 1944

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Table 3. (contd.)

Civil Service Rank(and salary)	Functions of personnel	General-direction & central servicing offices		Postal and telegraph district								Postal district Vienna		Telegraph district Vienna		Totals		Group totals	Per-centage
				Graz		Innsbruck		Klagenfurt		Linz									
		Male	Female	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
5	Secretarial service (Kanzleidienst)	42	73	21	23	14	11	6	9	36	15	65	50	71	54	255	235		
	Specialized office, traffic, or material depot service (Fachlicher Amts-, Verkehrs-, und Zeugdienst)	10	-	132	-	83	2	72	-	185	-	882	-	24	-	1388	2	2183	11.62
	Construction and maintenance I (Bau- und Erhaltungsdienst I)	-	-	36	-	21	-	15	-	47	-	-	-	171	-	290	-		
	Pneumatic post service I (Rohrpostmaschinendienst I)	-	-	-	-	-	-	-	-	-	-	-	-	13	-	13	-		

Table 3. (contd.)

Civil Service Rank (and salary)	Functions of personnel	General-direction & central servicing offices		Postal and telegraph district								Postal district Vienna		Telegraph district Vienna		Totals		Group totals	per-centage
				Graz		Innsbruck		Klagenfurt		Linz									
		Male	Female	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
4	Building supervision (Gebäudeaufseher)	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	5802	30.90
	Office, traffic, or material depot service (Amts-, Verkehrs- und Zeugdienst)	59	2	604	4	355	1	227	-	806	3	3262	4	70	-	5383	14		
	Elementary construction and maintenance III (Einfacher Bau- und Erhaltungsdienst III)	1	-	12	-	23	-	7	-	23	-	-	-	337	-	403	-		
3	Certified auxiliary services and skilled labor (Qualifizierter Hilfsdienst und gelernte Handwerker)	15	4	9	-	6	-	-	-	4	-	-	2	10	-	44	6	497	2.65
	Elementary construction and maintenance II (Einfacher Bau- und Erhaltungsdienst II)	4	-	18	-	7	-	10	-	78	-	-	-	327	3	444	3		

Table 3. (contd.)

Civil Service Rank (and salary)	Functions of personnel	General-direction & central servicing offices		Postal and telegraph district								Postal district Vienna		Telegraph district Vienna		Totals		Group totals	Percentage
				Graz		Innsbruck		Klagenfurt		Linz									
		Male	Female	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
2	Auxiliary services (Hilfsdienst)	5	-	6	-	5	-	5	-	4	-	23	-	9	-	57	-		
	Office, traffic, and material depot auxiliary work (Amts-, Verkehrs-, und Zeughilfsdienst)	18	1	119	2	73	-	35	-	140	-	878	3	65	3	1328	9	1486	7.91
	Elementary construction and maintenance I (Einfacher Bau- und Erhaltungsdienst I)	-	-	-	-	-	-	-	-	-	5	-	-	-	87	-	92		
1	Elementary auxiliary services (Einfacher Hilfsdienst)	8	9	36	5	4	7	9	7	39	17	337	44	7	55	440	144	584	3.11
	Total	493	140	1488	316	980	188	600	136	2129	339	7855	838	2390	1385	15435	3342	18777	100.00

II. TELEPHONE

A. Extent and development

The Austrian telephone system compared favorably with that of other European countries in amount and distribution of equipment. Much of it, however, was rapidly becoming obsolete by the time of the Anschluss. Germany has probably made considerable improvements in recent years. The telephone system constituted by far the most important part of the telecommunications services in Austria, and in the general PTT organization it ranked second only to the combined postal services as a source of income. (See Section I-E.)

1. Line. Austria's strategic position on the continent has enhanced the importance of its transit facilities for wire communications, and in particular telephone communications. The application of radio to telegraphy has increased somewhat the independence of telegraph facilities in those countries bordering on Austria, but radio-telephony has not yet proved a serious competitor of line telephony on overland routes, and Austria will continue to provide the most convenient transit lines for telephone service, which remains today the most important means of communication.

In 1925, realizing the future importance of Austrian cable lines, Germany sent a representative from the Reichspostministerium to Vienna to obtain a concession for building up Austria's long-distance cable network. It was, on the surface, a profitable business scheme only, but actually it was one of the first steps toward controlling the Austrian communications system.

Thus under German auspices a large-scale construction program was begun in 1926. The existing open-wire lines, even if augmented to a considerable extent, would have been inadequate to provide sufficient circuits for the national as well as international service anticipated, and so the first long-distance underground cable was laid.[1] Since then, all new long-distance lines have gone underground and almost all existing long-distance lines have been converted to underground cable.[2] In 1936 the country had 3,271 kilometers of long-distance cable, of which 1,578 kilometers were trunk lines and 1,693 kilometers were interurban lines (Table 4). Intra-urban or short-distance lines have gradually been going underground, also. In 1936 underground cable already formed approximately one-fourth of the total length of existing short-distance telephone lines (9,741.1 out of 35,610.7 kilometers). (See Table 5.) The federal state of Vienna had more cable than all the rest of Austria (7,732 out of 11,003 kilometers).

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[1] There was no known overhead cable in Austria so that the terms "cable" and "underground" are synonymous. Open-wire lines are of necessity overhead lines.

[2] Aside from its protective advantages, another reason for the laying of underground cable was the electrification of many federal railway lines which created considerable inductive interference.

Locational information on all important long-distance lines is shown on Map No. A-5374. The routes of some cables are known and marked; the routes of others are indicated as probable. Long-distance connections between the larger cities probably parallel the railroad lines and other connections parallel the main roads, usually at a depth of about 70 centimeters. Little information is available concerning the routing of open-wire lines, but the main junctions and the connections with adjoining countries were probably made by cable.

Long-distance cable used a larger number of 4-wire than 2-wire circuits but interurban cable used only 2-wire circuits (Table 6). International circuits are listed in Table 7; detailed description of Austrian cables in Table 8. Most telephone cables constructed after 1930 contained telegraph lines also. Carrier telephony was used on some of the trunk lines. See Nomenclature des Circuits Téléphoniques Internationaux, 1939, published by the International Telecommunications Union in Berne.

A broadband (Breitband) cable between Munich and Vienna was completed in the summer of 1940. Little is known of the route except that it passes through Salzburg and Bruck a.d. Mur.

Repeater stations (Map No. A-5374) were located at distances ranging from 50 to 100 kilometers apart, usually in the main post office of the largest town within that stretch of cable line.

2. Station and Exchange.

a. Distribution. At the end of December 1935 Austria had 272,139 telephones, an average of 4.03 per hundred population (Table 9)[1]. By 1939 this number had increased to 289,308, an average of 4.1 per 100 population (see Table V in Appendix). Since that time both number and percentage have increased considerably. As in Germany, however, they are still far below those for the United States (16.56 telephones per 100 population in 1941).

In 1935, over half the total number of telephones in the country (184,840, or an average of 9.86 per hundred population) were installed in the local exchange area of Vienna, whose boundaries coincide with the federal state of Vienna. Salzburg was the only other state averaging more than three telephones per hundred population.

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[1] This does not include the independent public telephones (selbständige öffentliche Sprechstellen) of which there were 709 in Austria (1935). These telephones were outside the local exchange areas and were connected directly with long-distance trunk lines.

This low average number of telephones per hundred population is partially accounted for by the fact that there were few exchanges of any great size in Austria. By 1936, Vienna had increased its number of telephones to 190,192; but Graz was the only other exchange with over 10,000 telephones. In all of Austria there were only thirteen other exchanges of over 1,000 subscribers (Table 10).

In 1935 there was a total of 1,807 local exchange areas in Austria. With the exception of Vienna, each local exchange area had only one main exchange,[1] and, depending on the size of the area, one or more branch exchanges (Table 9).

As in all postal and telecommunications services, the city of Vienna with its tremendous volume of business involved more complicated and usually more technically advanced facilities. Thus, in order to meet the telephone traffic demand of the capital city, there were twenty-four main exchanges within Greater Vienna, all capable of making trunk connections. (Map No. A-3566) The trunk or central exchange office (which also acted as a main exchange for its own area) is indicated on this map as F.A. (*Fernamt* or long-distance office). It was located in Vienna I, Schillerplatz 4. Of the twenty-four exchanges two have a capacity of 20,000 lines; nineteen of 10,000 lines; one of 3,000 lines and one of 500 lines. All of these exchanges were automatized by 1938 except Atzgersdorf (the exchange of 500 lines).

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[1] Exchanges which were connected with the trunk lines were the main exchanges of the exchange area, i.e. a trunk exchange and a main exchange were synonomous, except in the case of Vienna.

Automatization and approximate size of other exchanges are indicated in Tables 11 and 12. Austria's three cities of over 100,000 population -- Vienna, Graz, and Linz -- had completely automatic exchanges. Telephone exchanges in most of the other large cities were gradually being converted to automatization. In automatization of postal and telegraph districts, Vienna was far in advance of the others, being 72 percent automatized. The other four districts in Austria together averaged less than 0.5 percent automatized, Klagenfurt being the only one of over 0.6 automatization. Innsbruck was still entirely manual. Because of the heavy centralization of telephone networks in the Vienna district, however, the average automatization for all of Austria was brought up to 24.1 percent.

b. *Local Administration*. The public telephone system was operated in two groups: 1) by local exchange areas (*Ortsnetze*); and 2) by independent public telephones

(Selbständigesprechstellen) and trunk circuits (Fernleitungen). The trunk circuits serviced not only long-distance traffic between trunk exchanges but also connected independent public telephones and isolated private subscribers not linked up with a local exchange network. Trunk exchanges are located on Map No. A-5374.

The local exchange areas were subdivided into five operating classifications: 1) one or more local exchanges (main and branch --Haupt- und Nebenvermittlungsämter); 2) usually one long-distance trunk exchange (Fernamt); 3) exchange connecting lines (Vermittlungsleitungen); 4) subscribers' connecting lines (Anschlusslinien); and 5) subscribers' telephones (Teilnehmerstellen) (Tables 6 and 9).

Subscribers' telephones fell into three categories: public, private, and extension. Public telephones totalled 4,526 in 1935. Of these 2,405 were public telephone stations (Öffentliche Sprechstellen); 1,412 were public coin boxes (öffentliche Münzfernsprecher); and 709 were independent public telephones (selbständige öffentliche Sprechstellen). (See Table 9.) There were no independent public telephones in the state of Vienna because all of the area consisted of a local exchange network.

Private telephones were divided into individual lines (Einzelanschlüsse), which totaled 85,710; urban party lines (Gesellschaftanschlüsse), with 19,535 2-subscriber lines and 79,107 4-subscriber lines; and rural party lines (Landanschlüsse), totaling 268. This large proportion of party lines is explained by the fact that few individuals aside from the very wealthy could afford to own a private telephone. The urban party lines were peculiar to the Austrian telephone system and were found only in networks of over 500 subscribers. The two or four subscribers on these lines could obtain group rates but were ensured privacy when telephoning. The rural party lines had anywhere from two to eight subscribers who did not enjoy the advantages of privacy.

The third group -- extension telephones -- formed a total of 83,702 out of 272,139 telephones in Austria in 1935 (Table 9).

B. Operation

1. Public Telephone System. In Austria the PTT performed services equivalent to those of private telephone companies in the United States. It provided the instrument and installed it for a fixed fee. The subscriber also paid the PTT a monthly rental charge for the telephone. This sum was determined by a two-zone division of the

local exchange area. The size of Zone I depended upon the number of subscribers as indicated below, distance being measured from the main exchange office:[1]

1.km.	under 50 subscribers
1.5 km.	51-200 subscribers
2 km.	201-500 subscribers
3 km.	501-2000 subscribers
4 km.	2,001-5,000 subscribers
5 km.	5,001-20,000 subscribers
6 km.	over 20,000 subscribers

For example, if there were only fifty subscribers the boundary of Zone 1 was placed arbitrarily at a distance of one kilometer from the main exchange office, etc. Zone II included all subscribers outside of Zone I and inside the local exchange area.

In 1935, 3,087 PTT offices in Austria offered public telephone services. Twenty-four were telephone offices handling telephone services only; 817 were contractual telephone offices (private telephone offices which had contracts with the PTT to handle telephone and telegraph services). The other 2,246 offices were postal and telegraph offices or postal agencies which offered telephone services in addition to their other functions. (See Table 1 in Section I-C.)

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[1] There were twenty-four main exchanges in Vienna and therefore distance is measured from the tower of the Cathedral (Stephansturm).

Hours of services of these offices are listed below:

Time of Service	Number of PTT Offices with Telephone Services
1. Uninterrupted day and night service (ununterbrochener Tag- und Nachtdienst)	75
2. Part-night service (halber Nachtdienst)	4
3. All-day service (voller Tagdienst)	134
4. Reduced day service -- at least 8 hours (beschränkter Tagdienst)	1,810
5. Shortened day service -- between 6 and 8 hours (gekürzter Tagdienst)	1,064
TOTAL PTT OFFICES	3,087

2. Private Telephone Systems. In addition to controlling public telephone communications, the Austrian PTT also licensed private communications systems, though it usually did not handle their installations. Large business concerns or government offices which wanted internal telephone connections and/or more than one public exchange line, could buy or rent complete installations from a private manufacturing firm. However, they were still required to pay a monthly fee for each public exchange line. Most of the private installations were manufactured by Siemens and Halske; others by Czeija, Nissl & Co.

3. Rates and Traffic. Long-distance rates in Austria were based on a division of the country into quadrangles

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3. *Rates and Traffic.* Long-distance rates in Austria were based on a division of the country into quadrangles

of 14.84 kilometers on a side. Charges were then determined by eight zones as follows:

Zone	Distance
1.	10 km.
2.	25 km.
3.	50 km.
4.	100 km.
5.	200 km.
6.	300 km.
7.	400 km.
8.	over 400 km.

Connections between any two points within zones one and two were measured by real distance, but the charge between any zones over one and two were determined by the distance measured between the centers of the respective quadrangles irrespective of the particular points within those quadrangles.

Because of the limited long-distance line, telephone calls were graded on a priority basis, rates being charged accordingly. Subscribers paid for the number of minutes the telephone was in use in local as well as long-distance calls. The categories of calls, arranged in order of priority, were as follows:

1. Lightning calls - Blitzgespräche
2. Urgent state calls - dringende Staatsgespräche
3. Urgent PTT calls - dringende Dienstgespräche
4. Urgent private calls - dringende Privatgespräche
5. Ordinary state calls - Staatsgespräche
6. Ordinary private calls - Privatgespräche
7. Ordinary PTT calls - Dienstgespräche

Not included in the above grading of calls was another category -- contracted calls (Monatsgespräche) -- which consisted of calls paid by the month and contracted with the PTT to be put through at the same time every day.

See Table 13 for long-distance traffic (interurban and trunk calls) in Austria, 1935.

C. Special Services

In the development of automatic telephony two special rural systems peculiar to Austria were introduced: the Landzentral and the Tal or Valley systems. The Reichspost has, since the Anschluss, taken over and extended both systems. The Landzentral is a star network with three sizes of exchanges centering on the Zentral, which is an automatic switching center connected to the local automatic exchanges by trunk lines. Subscribers in any part of the network can make direct dial connections in a single operation instead of going through the long-distance offices. The plan also involves considerable reduction in length of routing necessary to handle traffic in more congested regions.

The Tal system is an unattended automatic exchange for party-lines to be used in long valleys with only one telephone line for up to thirty subscribers. Supposedly, by the use of local rather than central batteries the new system provided better reception and private ringing facilities than could be installed on ordinary Land or rural party-lines.

In Vienna, the police and fire departments had their own telephone networks but all other such special services formed a part of the local telephone systems.

Table 4. LONG-DISTANCE (TRUNK AND INTERURBAN) TELEPHONE CABLE IN AUSTRIA (1936)
(in kilometers)

Federal state	Type of cable	Length of Cable	Length of Wire	PTT circuits: Length of wire in existing circuits, 2-wire	PTT circuits: Length of wire in existing circuits, 4-wire	PTT circuits: Length of wire in phantom circuits, 2-wire	PTT circuits: Length of wire in phantom circuits, 4-wire	Rented circuits[a]: Length of wire in existing circuits, 2-wire	Rented circuits[a]: Length of wire in phantom circuits, 2-wire	Rented circuits[a]: Length of wire in phantom circuits, 4-wire
Vienna (Wien) Niederösterreich Burgenland	Trunk	392.5	90,213.7	25,086.9	33,068.7	6,041.8	3,887.1	526.0	351.2	-
	Interurban	329.6	26,251.8	12,933.3	-	1,455.9	-	1,154.8	16.1	-
Oberösterreich	Trunk	313.6	61,808.5	10,645.6	29,332.6	3,377.4	12,729.8	224.7	456.1	-
	Interurban	192.9	6,854.1	5,682.3	-	949.8	-	-	33.7	-
Salzburg	Trunk	63.5	12,675.9	2,286.8	6,345.4	1,087.9	2,788.4	-	126.7	-
	Interurban	214.3	17,193.4	9,858.2	-	1,330.2	-	-	-	-
Steiermark	Trunk	352.8	77,248.6	15,981.7	23,082.4	4,362.9	8,644.6	598.0	334.8	447.6
	Interurban	175.4	6,134.9	3,160.5	-	234.9	-	-	87.5	-
Kärnten	Trunk	113.3	22,614.6	2,859.4	6,344.8	581.8	1,495.4	-	90.6	-
	Interurban	174.1	11,119.9	6,932.2	-	1,107.7	-	-	39.7	-
Tirol	Trunk	278.5	55,558.3	9,028.9	17,894.0	1,832.5	3,714.4	556.9	66.5	471.7
	Interurban	497.3	18,188.5	8,652.3	-	1,002.6	-	37.5	64.3	-
Vorarlberg	Trunk	63.8	12,768.6	2,303.4	3,646.4	480.2	769.0	66.4	-	-
	Interurban	109.4	5,117.7	5,711.4	-	146.5	-	149.4	98.3	160.9
Totals	Trunk	1,578.0	332,888.2	68,192.7	119,714.3	17,764.5	34,028.7	1,972.0	1,425.9	919.3
	Interurban	1,693.0	91,860.3	52,930.2	-	6,227.6	-	1,341.7	339.6	160.9
Total long-distance cable		3,271.0	423,748.5	121,122.9	119,714.3	23,992.1	34,028.7	3,313.7	1,765.5	1,080.2

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a. Rented to RAVAG

Table 5. LENGTH OF TELEPHONE LINE IN AUSTRIA, 1936 (EXCLUDING LONG-DISTANCE CABLE)
(in kilometers)

Federal state	Exchange and subscribers' line (Vermittlungs- und Anschlussleitungen)			Rural line (Überlandfernsprechleitungen)			Private line (Privatfernsprechleitungen)			Totals		
	Open wire	Cable	Total	Open wire	Cable	Total	Open wire	Cable	Total	Open wire	Cable	Total
Vienna (Wien)	1,646.1	7,480.3	9,126.4	18.8	100.4	119.2	46.7	151.3	198.0	1,711.6	7,732.0	9,443.6
Niederösterreich	3,060.3	260.4	3,320.7	4,104.0	55.2	4,159.2	1,305.7	123.5	1,429.2	8,470.0	439.1	8,909.1
Burgenland	351.0	8.2	359.2	1,273.0	1.2	1,274.2	126.0	0.4	126.4	1,750.0	9.8	1,759.8
Oberösterreich	1,304.9	248.2	1,553.1	2,299.2	11.3	2,310.5	118.0	29.5	147.5	3,722.1	289.0	4,011.1
Salzburg	674.7	156.8	831.5	743.0	0.6	743.6	100.9	3.0	103.9	1,518.6	160.4	1,679.0
Steiermark	1,138.8	185.2	1,324.0	2,093.9	27.8	2,121.7	150.6	36.5	187.1	3,383.3	249.5	3,632.8
Kärnten	502.2	124.3	626.5	879.9	0.3	880.2	155.0	46.0	201.0	1,537.1	170.6	1,707.7
Tirol	964.4	258.5	1,222.9	1,884.6	172.7	2,057.3	156.2	61.1	217.3	3,005.2	492.3	3,497.5
Vorarlberg	294.7	97.5	392.2	431.7	70.0	501.7	45.3	30.9	76.2	771.7	198.4	970.1
Total	9,937.1	8,819.4	18,756.5	13,728.1	439.5	14,167.6	2,204.4	482.2	2,686.6	25,869.6	9,741.1	35,610.7

Table 6. LENGTH OF TELEPHONE WIRE IN AUSTRIA, 1936 (EXCLUDING CIRCUITS IN LONG-DISTANCE CABLE)
(in kilometers)

Federal state	Exchange and subscribers' line (Vermittlungs- und Anschlussleitungen)			Rural line (Überlandfernsprechleitungen)			Private line (Privatfernsprechleitungen)			Total line		
	Wire	Cable	Total	Wire	Cable	Total	Wire	Cable	Total	Wire	Cable	Total
Vienna (Wien)	16,071.1	388,793.1	404,864.2	355.3	960.3	1,315.6	84.0	2,400.3	2,484.3	16,510.4	392,153.7	408,664.1
Niederösterreich	19,728.3	18,311.0	38,039.3	25,913.0	1,473.7	27,386.7	2,327.4	2,120.9	4,448.3	47,968.7	21,905.6	69,874.3
Burgenland	901.3	418.7	1,320.0	3,364.6	34.1	3,398.7	143.4	0.8	144.2	4,409.3	453.6	4,862.9
Oberösterreich	7,361.8	23,327.6	30,689.4	10,258.9	409.5	10,668.4	480.1	59.1	539.2	18,100.8	23,796.2	41,897.0
Salzburg	3,497.7	16,148.1	19,645.8	3,174.2	126.1	3,300.3	306.0	35.6	341.6	6,977.9	16,309.8	23,287.7
Steiermark	7,521.8	42,912.5	50,434.3	11,053.2	203.9	11,257.1	763.6	80.9	844.5	19,338.6	43,197.3	62,535.9
Kärnten	3,309.6	14,495.8	17,805.4	5,559.8	3.5	5,563.3	213.0	139.0	352.0	9,082.4	14,638.3	23,720.7
Tirol	2,612.3	17,836.7	20,449.0	3,788.6	337.9	4,126.5	318.5	135.3	453.8	6,719.4	18,309.9	25,029.3
Vorarlberg	6,961.0	1,006.5	7,967.5	875.5	140.0	1,015.5	90.6	61.9	152.5	7,927.1	1,208.4	9,135.5
Total	67,964.9	523,250.0	591,214.9	64,343.1	3,689.0	68,032.1	4,726.6	5,033.8	9,760.4	137,034.6	531,972.8	669,007.4

Table 7. INTERNATIONAL TELEPHONE CIRCUITS IN AUSTRIA, 1938

Connections	Total circuits	Of which
Vienna-Germany	43	11 to Berlin
Vienna-Czechoslovakia	44	(12 to Prague (6 to Brno (9 to Bratislava
Vienna-Poland	9	
Vienna-Hungary	23	18 to Budapest
Vienna-Jugoslavia	8	
Vienna-Italy	15	
Vienna-Switzerland	17	
Vienna-France	4	
Vienna-England	2	
Vienna-Belgium	1	
Vienna-Holland	2	
Vienna-Rumania	3	

Table 8

TECHNICAL DETAILS OF BURIED TELEPHONE CABLES IN AUSTRIA

taken from the BERNE list of International Telephone Cables, 1937

D.M. = DIESELHORST MARTIN (Quadded Pairs)
P = Pair

Refc. No. in Berne list	Type of Cable	No. of Quads	Diameter of Conductors in m.m.	Type of Loading	Remarks
100	Vienna-Passau DM 49	1	0.9	200/9.4-2000	Lead shielded
		20	1.4	190/70-2000	
		16	0.9	200/70-2000	
		12	0.9	50/20-2000	
101	Vienna-Purkersdorf DM 19	19	1.5	85/35-2640	
102	Linz-Oberriet				
	Linz-Salzburg DM 50	1	0.9	200/9.4-2000	Lead shielded
		7	1.4	190/70-2000	
		8	0.9	200/70-2000	
		34	0.9	50/20-2000	
	Salzburg-Wörgl DM 50	1	1.0	200/9.4-2000	Lead shielded
		7	1.5	190/70-2000	
		8	1.0	200/70-2000	
		34	1.0	50/20-2000	
	Wörgl-Innsbruck DM 50	1	0.9	200/9.4-2000	Lead shielded
		7	1.4	190/70-2000	
		8	0.9	200/70-2000	
		34	0.9	50/20-2000	
	Innsbruck-Bludenz DM 50	1	0.9	200/9.4-2000	Lead shielded
		7	1.4	190/70-2000	
		8	0.9	200/70-2000	
		34	0.9	50/20-2000	

Table 8 (cont'd -2)

Refc. No. in Berne list	Type of Cable	No. of Quads	Diameter of Conductors in m.m.	Type of Loading	Remarks
102	Bludenz-Oberriet DM 50	1	0.9	177/15/un-loaded-1830	Lead shielded
		7	1.4	177/63-1830	
		8	0.9	177/63-1830	
		34	0.9	40/20-1830	
103	Salzburg-Bad Reichenhall DM 9	1	1.4	140/9.4-1640	Lead shielded
		8	1.4	140/56-1640	
104	Melleck-Lofer DM 3	3	1.4	140/56-1640	
105	Wörgl-Innsbruck DM 17	1	0.9	50/20-1830	
		12	1.5	50/20-1830	
		4	1.5	non-loaded	
106	Innsbruck-Zirl 14 pair cable	3 p.	2.0	85-1830	
		11 p.	1.0	85-1830	
	Cable DM 12	12	1.4	85/35-1830	
107	Zirl-Silz DM 10	10	1.4	85/35-1830	
108	Silz-K.H. Magerbach 11 pair cable	1 p.	3.0	85-1830	
		1 p.	2.0	85-1830	
		1 quad	1.5	85/35-1830	
		2 quads	2.0	85/35-1830	
		1 quad	1.0	85/35-1830	
		1 p.	1.0	85-1830	
	Cable DM 7	7	1.4	85/35-1830	
109	K.H. Magerbach-Landeck, Tir. 16 pair cable	1 p.	3.0	85-1830	
		1 p.	2.0	85-1830	
		1 quad	1.5	85/35-1830	
		3 quads	1.8	85/35-1830	
		6 p.	1.5	85-1830	
	Cable DM 3	3	1.4	85/35-1830	

Table 8 (cont'd -3)

Refc. No. in Berne list	Type of Cable	No. of Quads	Diameter of Conductors in m.m.	Type of Loading	Remarks
110	Landeck, Tir.-Bludenz				
	20 pair cable	1 p.	3.0	50-1830	
		1 p.	2.0	50-1830	
		1 quad	2.0	50/20-1830	
		4 quads	1.8	50/20-1830	
		4 quads	1.5	50/20-1830	
111	Bludenz-Feldkirch				
	20 pair cable	1 p.	3.0	50/1830	
		1 p.	2.0	50-1830	
		1 quad	2.0	50/20-1830	
		4 quads	1.8	50/20-1830	
		4 quads	1.5	50/20-1830	
	Cable DM 7	7	1.5	50/20-1830	
112	Linz-Wels DM 19	19	1.4	85/35-1830	
113	Wels-Gmunden DM 12	12	1.4	85/35-1830	
114	Gmunden-Bad Ischl				
	9 pair cable	3 p.	2.0	85-2000	
		6 p.	1.5	85-2000	
	9 pair cable	3 p.	2.0	85-2000	
		6 p.	1.0	85-2000	
115	Bad Ischl-S. Agatha				
	8 pair cable	1 p.	2.0	85-1830	
		7 p.	1.0	85-1830	
	9 pair cable	3 p.	1.5	85-1830	
		6 p.	2.0	85-1830	
116	Salzburg-Badgastein DM 27	27	1.4	85/35-1830	

Table 8 (cont'd -4)

Refc. No. in Berne list	Type of Cable	No. of Quads	Diameter of Conductors in m.m.	Type of Loading	Remarks
117	Badgastein-Villach DM 19	19	1.4	85/35-1830	
118	Wörgl-Lend DM 19	19	1.4	85/35-1830	
119	Wörgl-Kufstein DM 6	1 5	0.9 1.5	150/1633	non-loaded
120	Wörgl-Hopfgarten DM 3	3	1.4	85/35-1830	
121	S. Johann i. T.-Kitzbühel DM 12	12	1.4	85/35-1830	
122	Innsbruck-Scharnitz DM 49	1 20 8 20	0.9 1.4 0.9 0.9	200/9.4-2000 190/70-2000 200/70-2000 50/20-2000	Lead shielded
123	Zirl-Mittenwald DM 7	7	1.4	85/35-1830	
124	Innsbruck-Brennero DM 12	12	1.4	85/35-1830	
125	Feldkirch-Bregenz DM 17	1 16	0.9 1.5	50/20-1830 50/20-1830	
126	Vienna-Breclav DM 49	1 20 10 18	0.9 1.4 0.9 0.9	200/9.4-2000 190/70-2000 200/70-2000 50/20-2000	Lead shielded
127	Vienna-Wolkersdorf DM 12	12	1.2	50/20-2000	

Table 8 (cont'd -5)

Refc. No. in Berne list	Type of Cable	No. of Quads	Diameter of Conductors in m.m.	Type of Loading	Remarks
128	Vienna-Halbturn DM 54	1 15 6 12 20	0.9 1.4 0.9 0.9 0.9	200/9.4-2000 190/70-2000 200/70-2000 50/20-2000 non-loaded	Lead shielded
129	Vienna-Bruck a.d.L. DM 19	19	1.4	85/35-1800	
130	Vienna-Bruck a.d.M. DM 83	1 20 8 20 34	0.9 1.4 0.9 0.9 0.9	200/9.4-2000 190/70-2000 200/70-2000 50/20-2000 30/12-1700	Lead shielded
131	Vienna-Wiener Neudorf DM 39	19 20	1.2 0.9	44/20-2000 44/20-2000	
132	Wiener Neudorf-Mödling DM 19	19	0.9	44/20-2000	
	Wiener Neudorf-Baden b.W.	19	1.2	44/20-2000	
133	Semmering-Mürzzuschlag DM 3	3	1.4	50/20-2000	
134	Mürzzuschlag-Bruck a.d.M. DM 7	7	1.4	50/20-2000	
135	Bruck a.d.M.-Graz DM 49	1 20 8 20	0.9 1.4 0.9 0.9	200/9.4-2000 190/70-2000 200/70-2000 50/20-2000	Lead shielded
136	Graz-Wildon DM 49	1 20 20 8	0.9 1.4 0.9 0.9	200/9.4-2000 non-loaded non loaded 200/70-2000	Lead shielded

Table 8 (cont'd -6)

Refc. No. in Berne list	Type of Cable	No.of Quads	Diameter of Conductors in m.m.	Type of Loading	Remarks
137	Wildon-Maribor	-	-	-	
138	Linz-Bruck a.d.M. DM 49	20 12 16 1	1.4 0.9 0.9 0.9	140/56-1700 140/56-1700 30/12-1700 140/12-1700	Lead shielded
139	Bruck a.d.M.-Leoben DM 19	19	1.4	140/56-1700	
140	Leoben-S.Michael DM 12	12	1.4	140/56-1700	
141	S. Michael-Judenburg DM 7	7	1.4	140/56-1700	
142	Bruck a.d.M.-Villach DM 50	7 34 8 1	1.4 0.9 0.9 0.9	140/56-1700 140/56-1700 30/12-1700 140/12-1700	Lead shielded
143	Villach-Tarvisio DM 49 and 1 pr.	7 16 26 1 p.	1.4 0.9 0.9 1.3	177/63-2000 177/63-2000 44/25-2000 13-2000	Lead shielded for music
144	Villach-Arnoldstein DM 7	7	0.9	140/56-1700	
145	Villach-Klagenfurt DM 19	19	1.4	50/20-1830	
146	Klagenfurt-S. Veidt a.d.G. DM 12	12	1.4	50/20-1830	
147	S. Veidt a.d.G.-Treibach DM 7	7	0.9	50/20-1830	

Table 8 (cont'd 7)

Refc. No. in Berne list	Type of Cable	No. of Quads	Diameter of Conductors in m.m.	Type of Loading	Remarks
148	Selzthal-Stainach Irdning DM 12	12	1.4	140/56-1700	
149	Stainach Irdning-Bad Aussee DM 7	7	1.4	140/56-1700	
150	Wien Schwarzau a. St. DM 25 and 2 pr.	25 2 p.	1.4 1.4	50/20-1886 12-1886	Metal shielded
151	Schwarzau a. St.-Gloggnitz DM 34 and 2 pr.	34 2 p.	1.4 1.4	50/20-1880 12-1880	Metal shielded
152	Schwarzau a. St.-Pitten DM 12	12	1.4	50/20-1750	
153	Neunkirchen-Ternitz DM 7	7	1.4	50/20-1862	
154	Wien-G.M.Bisamberg DM 30 and 6 pr.	26 5 3 p. 3 p.	1.4 0.9 0.9 0.9	50/20-1889 50/20-1889 200-945 13-945	Metal shielded
155	G.M. Bisamberg-Stockerau DM 30	30	1.4	50/20-1889	
156	Stockerau-Hollabrunn	21	1.4	50/20-1891	
157	Hollabrunn-Göpfritz a.d.W. DM 12	12	1.4	50/20-1885	
158	K.H. Magerbach-Ötzthal DM 7	7	1.4	85/35/1855	
159	K.H. Rotholz-Jenbach 2 cables a DM 6	1 5	0.9 1.5		

Table 9. TELEPHONE FACILITIES IN AUSTRIA, 1935

Federal state →	Vienna (Wien)	Niederösterreich	Burgenland	Oberösterreich	Salzburg	Steiermark	Kärnten	Tirol	Vorarlberg	Total Austria
Local exchange areas (Ortsnetze)	1	653	110	312	106	291	156	128	50	1,807
Exchanges (Vermittlungsämter)										
Main (Haupt-)	16	653	110	312	106	291	156	128	50	1,822
Branch (Neben-)	1	99	4	45	23	22	10	19	28	251
Independent public telephones (Selbständige Öffentliche Sprechstellen)	-	286	23	34	31	136	91	97	11	709
Public telephones (Öffentliche Sprechstellen)	132	802	115	383	146	356	186	198	87	2,405
Public coin boxes (Öffentliche Münzfernsprecher)	1,306	12	-	12	11	47	10	11	3	1,412
Individual subscribers' telephones, including PTT telephones										
Individual lines (Einzelanschlüsse)	41690	12,925	1,129	8,006	3,112	9,453	3,694	3,466	2,235	85,710
Urban party lines (Gesellschaftsanschlüsse)										
of 2 subscribers	17,212	308	-	713	225	685	8	312	72	19,535
of 4 subscribers	68,007	1,875	-	2,697	1,766	1,890	208	2,290	374	79,107
Rural party lines (Landanschlüsse)	-	3	-	36	19	4	27	95	84	268
Total subscribers' telephones (except independent public telephones)	128,347	15,925	1,244	11,847	5,279	12,435	4,133	6,372	2,855	188,437
Extensions										
Government (Staatliche)	16,041	4,139	204	2,689	1,262	2,238	1,172	1,560	846	30,151
Private (Privat)	38,934	2,674	179	2,690	1,528	3,187	842	1,157	367	51,558
PTT (Dienstliche)	1,518	40	1	192	94	36	53	51	8	1,993
Total	56,493	6,853	384	5,571	2,884	5,461	2,067	2,768	1,221	83,702
Total telephones	184,840	22,778	1,628	17,418	8,163	17,896	6,200	9,140	4,076	272,139
Telephones per hundred population	9.86	1.50	0.56	1.93	3.32	1.76	1.53	2.61	2.62	4.03

Table 10. NUMBER AND TYPE OF TELEPHONES IN LOCAL EXCHANGES WITH MORE THAN 500 SUBSCRIBERS IN AUSTRIA, 1936

Local exchanges (Ortsnetze) -	Vienna (Wien)	Baden	Möd-ling	St. Pölten	Wiener Neustadt	Kloster-neuburg	Linz	Wels	Steyr
Exchanges (Vermittlungsämter)									
Main (Haupt-)	17	1	1	1	1	1	1	1	1
Branch (Neben-)	1	3	10	5	-	3	4	2	3
Number of lines for individual subscribers, public telephones, public coin telephones, and PTT telephones (Teilnehmerstellen, offentliche Sprechstellen, offentliche Münzfernsprecher und Dienstsprechstellen)									
Individual lines (Einzelanschlüsse)	43,436	519	491	498	760	602	2,255	431	269
Urban party lines (Gesellschaftsanschlusse)	89,390	933	713	452	---	---	2,902	391	441
Rural party lines (Landanschlüsse)	---	---	---	---	---	---	---	---	---
Total	132,826	1,452	1,204	950	760	602	5,157	822	710
Extensions (Nebenstellen)									
Government (staatliche)	15,318	437	206	313	304	48	1,216	262	161
Private (privat)	40,485	317	145	316	338	132	1,878	265	144
PTT (dienstliche)	1,563	4	3	7	11	--	173	9	2
Total	57,366	758	354	636	653	180	3,267	536	307
Total telephones	190,192	2,210	1,558	1,586	1,413	782	8,424	1,358	1,017

Table 10. NUMBER AND TYPE OF TELEPHONES IN LOCAL EXCHANGES WITH MORE THAN 500 SUBSCRIBERS IN AUSTRIA, 1936 (Contd)

Local exchanges (Ortsnetze) -	Salzburg	Graz	Klagenfurt	Villach	Innsbruck	Bregenz	Dornbirn	Feldkirch
Exchanges (Vermittlungsämter)								
Main (Haupt-)	1	1	1	1	1	1	1	1
Branch (Neben-)	11	-	-	-	6	8	4	11
Number of lines for individual subscribers, public telephones, public coin telephones, and PTT telephones (Teilnehmerstellen, öffentliche Sprechstellen, öffentliche Münzfernsprecher und Dienstsprechstellen)								
Individual lines (Einzelanschlüsse)	1,312	4,847	1,198	851	1,506	568	695	479
Urban party lines (Gesellschaftsanschlüsse)	2,213	2,930	354	---	2,873	316	90	54
Rural party lines (Landanschlüsse)	---	---	---	---	---	3	---	33
Total	3,525	7,777	1,552	851	4,379	887	785	566
Extensions (Nebenstellen)								
Government (staatliche)	661	1,120	589	149	953	353	240	168
Private (privat)	1,191	2,729	636	260	1,314	191	103	83
PTT (dienstliche)	71	31	52	---	63	3	1	5
Total	1,923	3,880	1,277	409	2,330	547	344	256
Total telephones	5,448	11,657	2,829	1,260	6,709	1,434	1,129	822

Table 11.

LARGE AUTOMATIC TELEPHONE EXCHANGES IN AUSTRIA, 1939 (Except Vienna)

Exchange (Listed according to size)	Population of Exchange Areas	Approximate Number of Subscribers
Graz [a]	207,747	11,270
Linz	128,195	6,950
Baden (near Vienna)	24,111	2,295
Klagenfurt [a]	56,701	2,000
Villach [a]	25,754	1,340
Vienna-Klostenburg	25,420	720
Gmunden and Altmünster	87,116	640

LARGE MANUAL TELEPHONE EXCHANGES IN AUSTRIA, 1939

Innsbruck [a]	80,722	6,800
Salzburg [a]	77,170	5,470
Vienna-Mödling	53,007	1,275
St. Polten	44,339	1,190
Wiener Neustadt	39,344	1,035
Bregenz [a]	54,198	1,030
Leoben [a]	75,439	690
Dornbirn [a]	17,572	660
Krems (on the Danube)	27,917	505
Znaim	91,565	480
Feldkirch	13,067	475

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a. Figures on subscribers for 1940.

Table 12. NUMBER AND CAPACITY[a] OF AUTOMATIC AND MANUAL EXCHANGES IN AUSTRIA, 1939

Postal and telegraph district	Capacity[a] (number of subscribers) Manual exchanges									Automatic exchanges									Total number of automatic and manual exchanges	Percentage of exchanges automatized
	25 and under	26-50	51-100	101-150	151-200	201-300	301-400	Over 400	Total	25 and under	26-50	51-100	101-150	151-200	201-300	301-400	Over 400	Total		
Innsbruck	209	25	16	3	1	8	1	5	268	-	-	-	-	-	-	-	-	-	268	0
Graz	283	22	11	5	1	3	-	1	326	-	-	-	-	-	-	-	1	1	327	0.3
Klagenfurt	101	6	8	-	2	2	-	-	119	-	-	-	-	-	-	-	2	2	121	1.7
Linz	259	25	13	5	1	1	1	2	307	-	-	-	-	-	-	-	2	2	309	0.6
Vienna I[b]	31	11	3	2	1	1	1	1	51	-	-	1	2	-	-	-	2	5	56	8.9
Vienna II[c]	52	54	16	11	7	4	-	4	148	508	-	-	-	-	-	-	1	509	657	77.5
Vienna I and II	83	65	19	13	8	5	1	5	199	508	-	1	2	-	-	-	3	514	713	72
Total for Austria	935	143	67	26	13	19	3	13	1,219	508	-	1	2	-	-	-	8	519	1,738	24.1

a The actual capacity of an exchange is usually 40 percent larger than its utilization which is indicated here by number of subscribers.

b Local exchanges (Ortsnetze) within the federal state of Vienna. In the telephone books from which these statistics were taken the term Ortsnetz was apparently used to mean main exchange offices as well as local exchange areas. In other tables and in the text the latter translation is used.

c Local exchanges in the federal states of Burgenland and Niederösterreich.

Table 13

TELEPHONE TRAFFIC IN AUSTRIA [a]
(1 January - 31 December 1935)

Type of Telephone Call	Domestic Calls (minutes)	Calls to Foreign Countries (minutes)	Calls from Foreign Countries (minutes)
Ordinary telephone calls (gewöhnliche Gespräche)	20,771,062	3,386,476	3,930,838
Urgent telephone calls (dringende Gespräche)	8,807	14,595	19,168
Lightning telephone calls (Blitzgespräche)	62	34	95
Contracted telephone calls (Monatsgespräche)	4,804	85,510	146,642
TOTAL TELEPHONE CALLS	20,784,735	3,486,615	4,077,609

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[a] Does not include local calls within the local exchange area (Ortsnetze).

III. TELEGRAPH AND MISCELLANEOUS WIRE SERVICES

A. Telegraph

1. Extent and Development. Telegraph services in Austria have been declining steadily, despite great technical progress made in this branch of telecommunications. The decline has generally been reflected in the increased use of the telephone, and more and more wires have been reassigned to telephone service. The development of cable for the telephone would provide similar advantages for telegraph facilities if expansion were needed.

Telegraph lines either formed a part of the telephone cable or used overhead wire. Number and type of telegraph circuits in long-distance (trunk and interurban) cable are given in Table 14. The postal and telegraph district of Vienna had the largest number of trunk circuits but had no interurban circuits. There were about twice as many 2-wire as 4-wire circuits. However, phantom circuits in telegraphy were only of 2-wire construction.

Length of local line and wire is given in Tables 15 and 16.

The railroads, which had their own telegraph administration, owned a large percentage of the total telegraph facilities. (37 percent of telegraph lines, 44 percent of telegraph wires.) The military, police, and fire authorities also had their own networks, but separate statistics are not available. Their equipment was similar to that of the PTT.

2. Operation. The Austrian PTT had a total of 3,098 offices with public telegraph services. Of these, nine were telegraph offices handling telegraph services only, 2,083 were postal and telegraph offices, 189 were postal agencies with telegraph services, and 817 were telephone offices under contract with the PTT for telegraph services. (See Table 1 in Section A-3.) Office hours of these services are listed below:

Time of Service	Number of PTT Offices with Telephone Services
1. Uninterrupted day and night service (ununterbrochener Tag- und Nachtdienst)	26
2. Part-night service (halber Nachtdienst)	1
3. All-day service (voller Tagdienst)	148
4. Reduced day service -- at least 8 hours (beschränkter Tagdienst)	1,828
5. Shortened day service -- between 6 and 8 hours (gekürzter Tagdienst)	1,095
TOTAL PTT OFFICES	3,098

In addition, 708 railroad telegraph offices were open to the general public. Their office hours probably coincided with the individual station's schedule.

Number of localities served, number and type of telegraph offices, and method of transmission are shown in Table 17. The central telegraph office of Austria was located in Vienna I, Börseplatz 1.

3. Type of Service. There was no difference in rates for day and night service within Austria, but some variation existed among the types, which are listed below in order of priority:

1) Lightning telegrams (Blitz-Telegramme)
2) Urgent telegrams (Dringende-Telegramme)
3) Ordinary telegrams (Gewöhnliche-Telegramme)
4) Deferred telegrams (Zurückgestellte-Telegramme)
5) Letter telegrams (Briefe-Telegramme)

In addition to the above categories there were special rates for PTT, railroad, shipping, aeronautical, and press telegrams. Telegraph traffic for the year 1935 is given in Table 18. In sending a telegram any commercial code or cipher could be used. The PTT used Morse for the transmission of all telegrams. In 1936 the number and type of machines used for transmission of telegrams were as follows (not including railroad telegraph equipment):

Morse	2,598
Klapfer	361
Hughes	219
Baudot	14
Siemens	1
Total	3,193

Telegrams sent within the city limits of Vienna were usually telephoned from one post office to the other instead of being transmitted by Morse.

B. Teletype

The recent development of teletype service constitutes the most important telegraphic advance. It also goes far toward explaining why the apparent drastic reduction in telegraph line does not necessarily mean an equal reduction in total service, since teletype makes greater use of the same line than does Morse, Hughes, Baudot or Siemens equipment.

By 1935 there were 53 teletype machines in Austria with the following connections:

Vienna-Berlin
Vienna-Budapest
Vienna-Belgrade
Vienna-Zagreb
Innsbruck-Munich
Innsbruck-Kitzbühel
Innsbruck-Salzburg
Salzburg-Munich

Apparently only the telegraph offices were connected by teletype and the individual had to relay his message to these offices as an ordinary telegram. Some business firms did have their own teletypewriters and direct connection with the network.

In 1938 there was introduced into Vienna a new type of teletype -- the automatic dial exchange. Airports at Vienna, Salzburg and Innsbruck were connected with each other by this system. No further development of teletype was made before the Anschluss. Under German occupation Vienna (and probably the above airports) were linked with the automatic dial exchanges of Greater Germany.

C. Facsimile

The only complete facsimile or telephotography installation (Bildtelegraphenstation) in Austria was located in Vienna. There was also a portable transmitter (tragbare Sender) sometimes used in conjunction with the above installation. Both were owned and operated by the PTT, and apparently used only for international traffic.

Direct connections existed from Vienna to Berlin, Hamburg, Frankfurt a.M., Cologne, Munich, Paris, London, Copenhagen, Stockholm, Oslo, Brussels, Rome, and Turin; indirect connections from Vienna to New York, San Francisco, Buenos Aires, and Bangkok. The number of telephotos transmitted and received in Austria in 1935 totaled 828,233 (Table 18).

TABLE 14. LONG-DISTANCE CABLE TELEGRAPH CIRCUITS IN AUSTRIA, 1936
(in kilometers)

Federal state	Type of cable	Length of wire in existing PTT circuits		Length of wire in PTT phantom circuits	Length of rented circuits[a]	
		2-wire	4-wire	(2-wire)	Existing circuits (2-wire)	Phantom circuits (2-wire)
Vienna (Wien)) Niederösterreich) Burgenland)	Trunk	2,092.4	1,341.6	-	-	168.8
	Interurban	-	-	-	78.0	-
Oberösterreich	Trunk	-	894.8	-	-	231.4
	Interurban	180.0	-	85.9	-	-
Salzburg	Trunk	-	253.5	-	-	126.7
	Interurban	1,266.6	-	1,790.7	-	-
Steiermark	Trunk	787.7	-	-	-	-
	Interurban	-	-	31.2	-	-
Kärnten	Trunk	362.4	-	-	-	-
	Interurban	239.7	-	127.7	-	-
Tirol	Trunk	581.4	1,512.7	-	132.9	-
	Interurban	3,022.6	-	675.3	-	113.8
Vorarlberg	Trunk	-	255.3	-	-	-
	Interurben	856.9	-	155.1	-	-
Totals	Trunk	3,823.9	4,257.9	-	132.9	526.9
	Interurban	5,565.8	-	2,865.9	78.0	113.8
Totals (Long-distance plus interurban)		9,389.7	4,257.9	2,865.9	210.9	640.7

a Rented to RAVAG

Table 15. LENGTH OF TELEGRAPH LINE IN AUSTRIA, 1936 (EXCLUDING LONG-DISTANCE CABLE)
(in kilometers)

Federal state	PTT			Railroad administration wire	Private installations wire	Total wire
	Open wire	Cables	Total			
Vienna (Wien)	71.8	283.5	355.3	250.0	47.3	652.6
Niederösterreich	2,569.5	7.1	2,576.6	2,436.8	-	5,013.4
Burgenland	782.9	0.8	783.7	70.3	-	854.0
Oberösterreich	674.8	60.8	735.6	169.7	0.5	905.8
Salzburg	131.2	14.6	145.8	81.8	0.1	227.7
Steiermark	1,419.2	22.1	1,441.3	289.2	-	1,730.5
Kärnten	528.5	10.4	538.9	114.6	-	653.5
Tirol	245.5	20.5	266.0	566.1	-	832.1
Vorarlberg	106.9	24.4	131.3	80.4	-	211.7
Total	6,530.3	444.2	6,974.5	4,058.9	47.9	11,081.3

Table 16. LENGTH OF TELEGRAPH WIRES IN AUSTRIA, 1936 (EXCLUDING THE CIRCUITS IN LONG-DISTANCE CABLE)
(in kilometers)

Federal state	PTT			Railroad administration wire	Private installations wire	Total wire
	Wire	Cables	Total			
Vienna (Wien)	478.7	3,003.1	3,481.8	1,425.4	891.2	5,798.4
Niederösterreich	13,502.8	72.6	13,575.4	11,284.3	-	24,859.7
Burgenland	2,769.3	2.3	2,771.6	883.2	-	3,654.8
Oberösterreich	3,578.9	693.6	4,272.5	4,188.3	55.9	8,516.7
Salzburg	889.7	401.5	1,291.2	640.8	25.5	1,957.5
Steiermark	6,774.0	275.9	7,049.9	6,082.5	-	13,132.4
Kärnten	2,299.3	243.9	2,543.2	2,991.1	-	5,534.3
Tirol	458.8	56.1	514.9	1,133.6	-	1,648.5
Vorarlberg	132.2	58.6	190.8	145.7	-	336.5
Total	30,883.7	4,807.6	35,691.3	28,774.9	972.6	65,438.8

Table 17. TELEGRAPH FACILITIES IN AUSTRIA, 1935

Federal state	No. of localities with telegraph facilities				Number of PTT offices with telegraph facilities						
	Telegrams transmitted by				Telegraph offices (Telegraphenämter)	Post & telegraph offices (Post- und Telegraphenämter) Telegrams transmitted by		Postal agencies (Postablagen) Telegrams transmitted by telephone	Telephone offices (Fernsprechämter)	Railroad telegraph offices (Eisenbahntelegraphenstationen)	Total telegraph offices
	Telegraph	Telephone	Both	Total		Telegraph	Telephone				
Vienna (Wien)	-	-	1	1	3	104	3	-	-	21	131
Niederösterreich	352	711	12	1,075	-	370	267	71	391	198	1,297
Burgenland	30	109	-	139	-	30	82	3	24	48	187
Oberösterreich	63	237	109	409	1	174	189	20	39	117	540
Salzburg	33	102	34	169	1	70	38	17	50	32	208
Steiermark	97	288	90	475	1	194	144	34	120	135	628
Kärnten	83	157	28	268	1	116	66	8	87	93	371
Tirol	21	215	37	273	1	58	108	28	88	45	328
Vorarlberg	18	68	11	97	1	28	42	8	18	19	116
Total Austria	697	1,887	322	2,906	9	1,144	939	189	817	708	3,806[a]

[a] Plus one private telegraph office making 3,807 total offices with telegraph facilities.

Table 18

TELEGRAPH TRAFFIC IN AUSTRIA
(1 January - 31 December, 1935)

Type of Telegram	No. of Domestic Telegrams	No. of Telegrams to Foreign Countries	No. of Telegrams from Foreign Countries
Ordinary telegrams (gewöhnliche Telegramme)	728,253	672,616	710,252
Lightning telegrams (Blitz-Telegramme)	3,588	6,490	5,043
Sea and air report telegrams (Flugsicherungs-, Hydro-Telegramme)	31,768	1,158	5,047
Press telegrams (Presse-Telegramme)	1,496	6,954	4,761
Deferred Telegrams (Zurückgestellte-Telegramme)	-	16,974	18,651
Letter telegrams (Brief-Telegramme)	36,513	35,558	51,418
Railroad telegrams (Zug-Telegramme)	669	533	-
PTT telegrams (Dienst-Telegramme)	128,612	36,693	32,790
Radio telegrams (Radio-Telegramme)	-	361	275
Facsimile telegrams (Bild-Telegramme)	-	58	6
TOTAL TELEGRAMS	930,899	777,395	828,233

IV. RADIO

Radio services were originally organized as a branch of the telegraph administration of the Austrian PTT. However, expenses proved so exorbitant that the government sold its radio interests to two joint-stock enterprises: 1) RAVAG (Radio Verkehrs Aktiengesellschaft); and 2) Radio-Austria AG. In addition to these companies, the police had its own radio-telephone network. There were no amateur radio operators in pre-Anschluss Austria.

A. RAVAG

The Austrian broadcasting corporation, RAVAG, was organized in October, 1924, as a mixed-ownership joint-stock company. It held a monopoly of the broadcasting and domestic radio-telephony and radio-telegraphy services, and was permitted to establish radio transmitters and receiving stations to operate domestic service stations.

The federal government was represented by the Generaldirektion which owned 30 percent of the stock and by the Credit Institute for Public Utilities and Works (Government Bank) (Credit-Institut für öffentliche Unternehmungen und Arbeiten) which owned 20 percent. The City of Vienna held another 20 percent of the stock.

Private ownership was divided among the Bank of Styria (20 percent) and three telephone manufacturing firms (Czeija, Nissl & Co., representing International Telephone and Telegraph; Kapsch & Söhne; and Leopolder & Sohn) who together owned the last 10 percent. Interests were represented in approximately the same percentage (public, 70 percent, private 30 percent) on the board of directors and the executive steering committee.

The Generaldirektion exerted control by rental of telephone and telegraph lines to RAVAG (see Tables 4 and 14). Also through the telegraph section, the Generaldirektion was responsible for issuing special licenses to all persons engaged in production, distribution, ownership, and operation of radio facilities. This process of licensing went so far as to require a permit for an incomplete apparatus, even if such apparatus were not in actual use. The most lucrative licensing returns were derived from the monthly rental fees of the owners of radio receiving sets. More than half of the households in Austria had radio sets. These funds, paid in through the local post offices, supported the operating and program costs of the broadcasting stations. The following table shows the distribution of radio receiver sets in Austria, 1 April 1941.

Postal District[1]	Radio Receiver Sets	Sets per 100 Households
Vienna	660,482	54.0
Graz	127,222	43.0
Innsbruck	66,713	54.5
Klagenfurt	44,019	40.8
Linz	160,665	47.5
TOTAL AUSTRIA	1,059,101	50.7

There are no statistics available for domestic radio-telephony or radio-telegraphy.

In addition to these functions of broadcasting, radio-telephony, and radio-telegraphy, RAVAG performed two special government services: 1) handling of weather reports for aeronautical use, and 2) transmission and reception of press telegrams for the government news office (Amtliche Nachrichtenstelle) in Vienna.

See Map No. A-5374 for locational information on radio installations in Austria. Complete details of installations may be found in MI 8 /A/44/40 "Report on Telecommunications in Austria."

B. Radio-Austria AG

Shortly after World War I, The Marconi Wireless Telegraph Company of London received the concession to build up and operate Austria's international radio-telegraph business, and in September 1922 founded Radio-Austria AG with central offices in Vienna I, Renngasse 14. Like RAVAG it was organized as a mixed-ownership, joint-stock company but government equity was only 30 percent of the total shares. The rest of the shares were owned by Marconi; and as such, Radio-Austria AG was the only private monopoly within the Austrian government.

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[1] German postal district. See Section I-D.

All installations were centered in or near Vienna. In 1937 there were six long and shortwave transmitter installations at Deutsch Altenburg and twenty-nine long and shortwave receiver installations at Laaerberg (see Map No. A-5374). Radio-Austria AG had three non-European connections: New York, Beirut (Lebanon), and Cairo, and eighteen European connections: Amsterdam, Barcelona, Belgrade, Berlin, Brussels, Bucharest, Copenhagen, Istanbul, London, Moscow, Oslo, Paris, Riga, Rome, Sofia, Tirana, Vatican City, and Warsaw. Total traffic in radio telegrams is given in Table 18 at the end of Section III.

V. POSTAL SERVICES

The Austrian Post provided the same services as the post offices of most other countries and in addition certain special facilities unknown in the United States.

A. Letter Post (Briefsendungen)

Letter post in Austria did not differ markedly from similar classes of the American post. The usual services of letters, postcards, registered letters, and business papers were included. Small packages could be sent by letter post to foreign countries. The railroads had arrangements with the PTT for the delivery of railroad station letters (Bahnhofbriefe) directly from the mail trains.

Shortly before the Anschluss a type of group mailing service (Postwurfsendungen) was introduced from Germany. Samples and advertisements were addressed to certain population groups (e.g., housewives, voters, bakers,etc.) and the distribution was left to the Post which prepared lists of such persons.

After the Anschluss the small packet (Päckchen) service was extended to domestic mail. Letter post traffic is given in Table 19.

B. Money mail (Nachnahme- und Postauftragssendungen)

The following classifications were administered under Letter Post but for the sake of clarification are grouped together as money mail. Money mail traffic is given in Table 20.

1. C.O.D. C.O.D. (Nachnahme) was much the same as in the United States save that the amount collected could be remitted either to the sender directly, to the Postal Savings Bank, or to a banking institution. The amount was transmitted by a C.O.D. money order (Nachnahmepostanweisung).

2. Money Letters (Wertbriefe). Money letters resembled American insured letters, but the post assumed responsibility only for the amount stated on the outside of the envelope.

3. Postal Money Orders (Postanweisung). The postal money order could be sent either by mail or telegraph, and personal messages could be included in it. Postal money orders, money letters, and government checks were delivered in all large communities by separate postmen (Geldbriefträger) who paid out the cash to the addressee.

4. Government checks. (Postzahlungsanweisungen). These were orders to the post office to pay to a stipulated person and were used for the payment of pensions, delivery of supplies, etc.

5. Bill collection. (Postauftrag). In using this service the creditor requested the post office to collect the debt and remit it to the creditor, the postal savings bank, or to a private bank. Collection was made by one of two forms: the Postauftragbrief which might be used to remit vouchers, bonds, etc., and the Postauftragkarte for amounts to 500 S,[1] money only being remitted. Under the Reichspost the Postauftragsbrief has been abolished.

C. Parcel Post. (See Table 21.)

Pre-Anschluss Austria recognized three types of parcel for postal purposes: first, ordinary parcels (Leichtverschlusspakete); second, sealed parcels (Schwerverschlusspakete); and third, cumbersome parcels (Sperrgutpakete). A letter could be enclosed with each parcel. The Germans abolished the distinction between ordinary parcels and sealed parcels, and insisted that jewelry, gold, etc. be sent by means of insured boxes (Kästchen). The Reichspost introduced into Austria a new category of parcel post called Postgut, whereby several parcels going to the same locality could be tied together and sent at a reduced rate, and still further reduced if they all went to the same addressee. Also introduced by the German Post was a service providing for the prepayment of customs by the sender of dutiable objects.

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[1] The Austrian Schilling -- see footnote to Table 2, section I-E.

D. Newspapers

The pre-Anschluss Austrian Post offered a subscription and delivery service for foreign newspapers. It provided only delivery service for domestic papers. After the Anschluss the Reichspost acted as agent for the collection of subscriptions as well as the delivery of all newspapers. Newspaper traffic for the year 1935 was as follows:

Subscribers	No. of pieces handled
Domestic	202,692,254
To foreign countries	24,011,816
From foreign countries	4,234,951
TOTALS	230,939,031

E. Changes under the Reichspost. In general, expansion of postal business in Austria after the Anschluss was irregular. Money letters and money boxes increased tremendously in volume (259,000 pieces in 1936 to 939,000 in 1939). On the other hand, letter traffic decreased steadily and newspapers fell off sharply.

Table 19

LETTER POST TRAFFIC IN AUSTRIA
(1 January - 31 December 1935)

	Domestic	To Foreign Countries	From Foreign Countries	Transit
Letters (Briefe)	205,611,000	47,866,000	30,033,000	418,000
Postcards (Postkarten)	95,193,000	23,773,000	16,023,000	133,000
Printed matter (Drucksachen)	243,991,000	28,152,000	15,436,000	91,000
Samples (Warenproben)	5,463,000	3,059,000	2,152,000	17,000
Business papers (Geschäftspapiere)	6,538,000	1,481,000	1,087,000	4,000
Commercial mail paid for by annual fee arrangement	36,798,000	-	-	-
Small packets (Päckchen)	-	150,000	227,000	1,000

Table 20

MONEY MAIL TRAFFIC IN AUSTRIA
(1 January - 31 December 1935)
(Domestic traffic only)

	Number of Pieces	Value (Schillings)[a]
C.O.D. letters (Eingeschriebene Briefsendungen mit Nachnahme)	363,000	4,006,000
C.O.D. insured letters (Wertbriefe mit Nachnahme)	1,000	135,000
C.O.D. packages (Pakete mit Nachnahme)	1,755,000	41,733,000
Postal collection letters (Postauftragsbriefe)	63,000	3,621,000
Postal collection cards (Postauftragskarten)	421,000	3,460,000

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a. See Table 2, Section I-E, for value of Austrian schilling.

Table 21

PARCEL POST TRAFFIC IN AUSTRIA (1 January - 31 December 1935)

	Domestic	To Foreign Countries	From Foreign Countries	Transit
Number of uninsured packages (*Pakete ohne Wertaugabe*)	11,069,000	654,000	724,000	436,000
Number of insured packages (*Pakete mit Wertaugabe*)	985,000	103,000	46,000	46,000
Total number of pieces	12,054,000	757,000	770,000	482,000
Total value of insurance (*schillings*[a])	64,655,000	15,836,000	11,865,000	--

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[a] See Table 2, Section I-E, for value of Austrian *schilling*.

VI. POSTAL COLLECTION AND DELIVERY

A. Collection

Mail was collected at the post offices and at post boxes, located for the most part at street corners. Of the 17,575 mail boxes in 1935, 490 were installed on public conveyances (trains and boats) and the rest on street corners or in public buildings. The number of post boxes in the various postal districts is given below:

Postal District	Number of Mail Boxes
Vienna	8,072
Graz	2,941
Innsbruck	1,712
Klagenfurt	1,324
Linz	8,072

Collections were less frequent on Sundays and legal holidays. Legal holidays included 1 and 6 January, Easter Monday, Ascension Day, Monday of Pentecost, Corpus Christi, 29 June, 15 August, 1 and 15 November, 25 and 26 December. In addition, each state had one or more patron saints whose days were legal holidays.

The PTT had an efficient parcel collection service in Vienna, elsewhere the sender had to bring his parcel into the post office for mailing. The vehicles used were almost exclusively electrically powered trucks.

B. Delivery

1. *Postal Addressing Districts*. After the *Anschluss*, in order to expedite the delivery of mail within Greater Germany, the *Reichspost* introduced a system of postal addressing districts. Austria was divided into two districts, 12a and 12b, which included the following areas:

12a	Reichsgau	Wien (Vienna) Niederdonau Steiermark (including Untersteiermark)
12b	Reichsgau	Kärnten (including Oberkrain and Unterkärnten) Oberdonau Salzburg Tirol-Vorarlberg

2. *Postal Delivery Zones*. The area of a post office was divided into two and sometimes three zones. First was the *Ortszustellbezirk* (local zone) where money order and postal collection service forms were delivered on the same basis as mail; second, the *Aussenbezirk* (outlying zone) where money orders and similar papers were not delivered, and where special delivery required a special delivery fee; and finally (in some cases) an *erweiterer Ortszustellbezirk* (extended local zone) where no regular delivery was made, but mail accumulated until an amount sufficient for distribution had been reached.

3. Methods of Delivery. Letter service was very efficient, especially in Vienna. Most of the mail was delivered by mail carriers who walked or used bicycles. In rural areas the PTT often rented private buses for the delivery of mail. In more remote mountainous areas delivery was sometimes made by horsedrawn vehicles, and a few routes were covered by mule or boat. Statistics for 1939 on these types of transportation are given in Table 22.

4. Frequency of Delivery. Postal deliveries were made in Austrian cities as often as five times a day, depending on the volume of business. There was one delivery on Sundays and on most holidays. In rural areas less than half the mail carrier zones had a daily delivery, and winter deliveries were even less frequent. The frequency of delivery in rural mail carrier zones in 1935 is given below:

Season	Number of Zones with Deliveries			
	Daily	3 to 5 per week	Less than 3	None
Summer	834	803	111	0
Winter	798	805	135	10

Special delivery was confined to the daytime unless otherwise specified.

Table 22

POSTAL DELIVERY TRANSPORTATION IN AUSTRIA
(1 January - 31 December 1935)

Type of Transportation	Length of route (in kilometers)	Km. travelled annually
By messenger	4,668	3,961,672
By horsedrawn vehicle or boat	2,049	1,038,920
By private car	4,251	3,275,135
By mule	29	5,530

VII. POSTAL TRANSPORT

The Austria PTT depended upon railways, motor vehicles and air transport companies for the major part of postal transport. Only for certain local services and in districts which were not served by public facilities did the PTT provide its own means of transportation.

A. Rail Transport

The railway was the principal means of transportation used by the postal service. In 1935 there was a total of 580 civil servants employed in this service, with 115 closed mail vans (Bahnposten) which were accompanied by postal employees (Gesamtpostkurse). However, in periods of heavy traffic ordinary closed freight cars (Postbeiwagen) were used without accompanying personnel. Conductors on most trains were made responsible for small batches of letters in closed mail bags. The PTT paid indemnities to the railroads for these services.

B. Motor Transport (Kraftpost)

Motor transport in Austria was used for both urban and rural connections. In urban areas motor vehicles carried mail between post offices or between post offices and railway stations in the same city. This service was originally restricted to Vienna and had not developed to any great extent in other places.

In rural areas the postal buses cannected regions not reached by rail. They provided passenger and freight as well as mail transport service. In 1937 the PTT owned 751 autobuses, 99 trailers, and 17 motor sledges. In 1935 there were 182 routes with a total length of 7,342 kilometers. This service was extended greatly after the Anschluss so that in 1939 the Reichspost ran 443 routes with a total length of 15,661 km. and carried 17,866 passengers. (See Tables on postal transport in Appendix.)

The PTT operated one repair shop in each postal district. These shops were responsible to the central servicing office for postal vehicles in Vienna. (See section A-2.)

C. Air Transport

Because of the relatively small area of the country, Austria's domestic airmail traffic was unimportant. However, air mail tourist traffic and transport to and from foreign countries was more significant. All of these air mail routes converged on Vienna. The following lines were in operation before the Anschluss:

Vienna-Bratislava
Vienna-Brno-Warsaw
Vienna-Venice-Rome
Vienna-Budapest
Vienna-Graz-Klagenfurt-Venice

Vienna-Graz-Zagreb-Zemun
Vienna-Prague-Dresden-Berlin
Vienna-Berlin
Vienna-Budapest-Belgrade-Sofia-Salonika
Vienna-Salzburg-Munich-Zürich
Vienna-Munich-Zürich
Vienna-Salzburg-Innsbruck-Zürich
Vienna-Prague-Nürnberg-Strasbourg-Paris
Vienna-Budapest-Belgrade-Bucharest-Istanbul
Vienna-Budapest
Vienna-Budapest
Vienna-Cologne-London
Amsterdam-Vienna-Dutch Indies

D. Pneumatic Post

The only known public pneumatic post (Rohrpost) network in Austria was located in Vienna. It was installed at the end of the nineteenth century and modernized several times in later years. It transmitted telegrams, letters, and postcards and was widely used by persons unable to afford a telephone. In 1939, there were 43 pneumatic stations from which messages could be sent and received. In addition to these there were 650 mail boxes for the deposit of pre-stamped messages. These boxes were distinguished by their red color and were emptied more frequently than ordinary mail boxes. Every post office in Vienna was connected with the network.

The main office and power station was located at the central telegraph office in Vienna, Börseplatz I. From this center the tubes radiated out in six lines.

There were four other power stations and a total of 80.1 kilometers of tubes (1939). Traffic sent by pneumatic post in Vienna in 1939 was as follows:

Telegrams ....,.	1,057,146
Letters and cards	1,462,182
Special delivery	2,745,664

VIII. POSTAL BANKING SYSTEM

A. Administration

1. Pre-Anschluss. The Austrian Postal Savings Bank (Österreichische Postsparkasse) was founded under the Austro-Hungarian Empire in 1883 and survived throughout each of the successor states with growing popularity. It was organized as a banking institution for both savings and checking under the Minister of Finance, and like the Generaldirektion was independent of the Ministry proper. It had its own funds and was given separate legal status. Except for the central office in Vienna, it had no offices of its own but paid annual indemnities to the PTT for the use of its facilities. With the exception of three offices in Vienna, in 1935 all post and telegraph offices (of which there were 2,080), and all post offices (68) handled postal banking accounts.

2. Post-Anschluss. After the Anschluss the postal banking services were taken over by the Reichspost. Only the postal savings service of the pre-Anschluss Postsparkasse was left under the new Postsparkassenamt (Postal Savings Office). The postal savings system, unknown in Germany until the Anschluss, was at that time taken over and its services extended to the whole

Reich. In the German administrative hierarchy the Postsparkassenamt ranked equally with a postal district headquarters (Postdirektion), and remained the one large-scale operation of the Reichspost which was completely centralized. The system continued to be administered independently and the property remained in a separate fund. Headquarters were still in Vienna and all central accounting was carried out there. Since the Nazis placed greater emphasis on postal savings, this system is probably more important in Greater Germany today than it was in pre-Anschluss Austria.

The postal checking system, which constituted the most important part of postal banking in pre-Anschluss Austria (approximately 90 percent), was separated from the banking services and merged with the German postal checking service (Postcheckdienst). It was self-supporting but made no profits. This service was administered by the Reichspost through central accounting offices (Postcheckämter) for groups of postal districts. The postal checking office in Vienna centralized all Austrian accounts.

B. Services

The postal banking system was organized to perform two functions, both designed primarily for those of small means: 1) that of a savings institution, and 2) that of a checking office for business firms who dealt with an extended clientele of this category. Its usefulness and popularity, however, soon attracted the patronage of persons in all economic groups. Another reason for its extensive use was the lack of branch offices of the commercial banks in rural districts.

1. Savings Institutions.

a. Operation. Any individual might own a postal savings account. Amounts as small as 1.6 S[1] (equal to 1 RM after the Anschluss) were accepted, and interest was paid. The rate of interest was less than that paid by ordinary savings banks and was so established in order not to compete with them. When the initial deposit was made, the depositor received a postal savings book (Postsparbuch), an identification card (Ausweiskarte), withdrawal cards (Rückzahlungskarten), and notification cards (Kündigungskarten). The books were in the form of stamp books or sheets. Filled books were turned in and credited to the account. No depositor could own more than one book, and his name and number were kept secret as a safeguard against theft or abuse. Deposits were recorded on a deposit form (Einzahlungschein) filled out by the depositor, and the post office acknowledged the receipt by making the appropriate entry in the book. Postal savings cards (Postsparkarten) with special fee stamps were accepted for deposit sums up to 3 RM. A depositor could transfer money from his own postal check account to his postal savings bank account, but transfer of funds between accounts other than that of husband and wife was not permitted. Withdrawals of sums up to 100 S (increased to 100 RM - post-Anschluss) could be made simply by filling out a withdrawal card while withdrawal of larger sums involved sending in the notification form from three days to three months in advance.

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[1] The Austrian schilling. See footnote to Table 2 in Section I-E.

The unique advantage of this system, like the postal checking system, was the fact that the owner of such an account could deposit and withdraw at any post office throughout Austria (throughout Greater Germany after the Anschluss). It served, therefore, as a circular letter of credit or a traveller's check, but was even more convenient because of the possibility of using smaller sums. Interest accrued per day from the first or fifteenth day following the deposit and was paid to the very day of withdrawal.

A postal savings account might be attached in case of bankruptcy by the same procedure which governed the attachments of other assets of bankrupts.

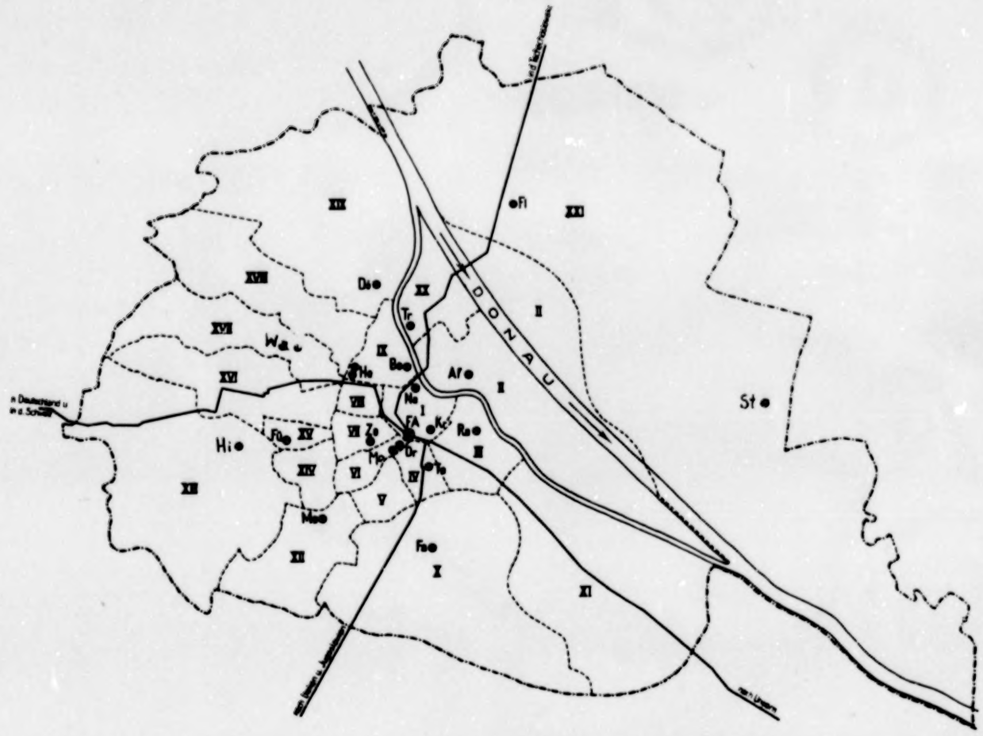
b. Types of Savings Accounts. The Austrian Savings Bank issued three types of depositors' books: 1) name-bearing books; 2) bearer-savings books; and 3) premium deposit books. The first type, which could only be used by the person named, was the most common in pre-*Anschluss* Austria; the second type, which could be used by anyone (provided that person could identify himself properly), was used throughout Germany and Austria after the *Anschluss*. The third type had a slightly lower rate of interest, but included the chance of winning a premium in an annual lottery if no withdrawal had been made by the depositor during the year. Both this and the first type of savings accounts were abolished shortly after the *Anschluss*.

2. Postal Checking. The checking service, which in pre-*Anschluss* Austria constituted about 90 percent of the business in the postal banking system, functioned

very much like checking-account service in ordinary banks. The important difference was that payments by money-orders could be made directly into these checking accounts. Business firms found the system especially convenient and attached to their bills such money-order blanks with the numbers of their checking accounts. The postal checking system had the same advantage as the postal savings system -- that of allowing the owner to transact business through any local post office.

The postal check consisted of three parts: the check proper, the right-hand stub, and the left-hand stub. When the check was presented by the payee at the post office, the check proper was retained by the bank and filed; the right-hand stub was sent to the owner with a statement of the transaction (receipt); the left-hand stub was retained by the payee. Checks were required to be cashed within twelve days of issue.

FREE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TELEPHONE OFFICES IN VIENNA, 1937

I.	Bezirk:	F.A.-Central Office	Schillerplatz	IX.	Bezirk:	He - Branch Office	Hebragasse (2)
		Kr -Branch Office	Krugerstrasse	X.	"	Fa - " "	Favoriten
		Ne - " "	Neutorgasse	XII.	"	Me - " "	Meidling
II.	"	Af - " "	Afrikanergasse	XIII.	"	Hi - " "	Hietzing
III.	"	Ra - " "	Rasumofskygasse	XV.	"	Fü - " "	Fünfhaus
IV.	"	Ta - " "	Taubstummengasse	XVII.	"	Wa - " "	Wattgasse
VI.	"	Dr - " "	Dreihufeisengasse	XIX.	"	Dö - " "	Döbling
		Mo - " "	Monoscheingasse	XX.	"	Tr - " "	Treustrasse
VII.	"	Zo - " "	Zollergasse	XXI.	"	Fl - " "	Floridsdorf
IX.	"	Be - " "	Berggasse			St - " "	Stadlau

LEGEND

—·—·—·—	City Boundary	●	Central Office
----------	Bezirk Boundary	•	Branch Office
I. - XXI.	Bezirk Numbers	———	Telephone Cable Route

NO. A-3566—R & A, OSS
18 OCTOBER 1944

FREE

LITHOGRAPHED IN THE REPRODUCTION BRANCH, OSS

APPENDIX

Tables I through XII

Table I

POSTAL ADMINISTRATION IN AUSTRIA
(31 March 1939)

Postal District	Graz	Innsbruck	Klagenfurt	Linz	Vienna	Total Austria
Area (Sq. Km.)	17,387	20,259	11,554	14,221	24,936	88,357
Population	1,122,947	717,398	436,298	1,020,818	3,796,284	7,093,745
Pop. per Sq.Km.	65	35	38	72	150	
Postal Offices[a]	504	499	262	490	1,110	2,865
Telecommunications Offices	140	508	128	38	312	1,126
Total Reichspost Offices	644	1,007	390	528	1,422	3,991

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[a] These figures include some offices of both the postal and telecommunications services, where any office serves in both categories. The figures for telecommunications services include offices in that category alone.

Table II

POST OFFICES IN AUSTRIA
(31 March 1939)

Postal District	Graz	Innsbruck	Klagenfurt	Linz	Vienna	Total Austria
Area in sq. km.	17,387	20,259	11,554	14,221	24,936	88,357
Population	1,122,947	717,398	436,298	1,020,818	3,796,284	7,093,745
Population per sq.km.	65	35	38	72	150	80
Post offices (Postämter)	146	135	64	136	376	857
Branch post offices (Zweigpostämter)	15	5	2	12	33	67
Postal agencies (Postagenturen)	229	212	146	273	511	1371
Rural post offices (Poststellen)	114	147	50	69	176	556
Mailing offices (Posthilfstellen)	0	0	0	0	13	13
Railway post offices (Bahnpostämter)	0	0	0	0	0	0
Total post offices	504	499	262	490	1,109	2,864

Table III

REICHSPOST EMPLOYEES IN AUSTRIA
(31 March 1939)

Postal District	Graz	Innsbruck	Klagenfurt	Linz	Vienna	Total Austria
Higher Civil Servants (Beamte) Qualified and Provisional:						
Men	1,728	1,752	716	1,706	10,726	16,628
Women	313	293	144	231	2,343	3,324
Part-time Civil Servants (Beamte in Nebenamt)	343	359	196	342	687	1,927
Personnel other than Beamte	2,684	2,804	1,353	2,592	11,448	20,881
Total Personnel	5,068	5,208	2,409	4,871	25,204	42,760

Table IV

TELEPHONE AND TELEGRAPH LINE STATISTICS IN AUSTRIA
(in kilometers)
(31 March 1939)

Postal District	Graz	Innsbruck	Klagenfurt	Linz	Vienna	Total Austria
Interurban telephone and telegraph line (Fernsprech- u. Telegraphenlinien von Ort zu Ort)	3,825	3,495	2,524	3,748	8,491	22,083
Interurban telephone wire (Fernsprechleitungen von Ort zu Ort	81,369	95,557	4,754	28,450	49,875	260,005
Telephone wire (Fernsprechortsleitungen)	56,630	11,522	9,231	34,687	55,079	167,149
Telegraph wire (Telegraphenleitungen)	9,321	14,960	1,625	3,790	14,573	44,269

Table V

TELEPHONE STATIONS IN AUSTRIA

(31 March 1939)

Postal District	Graz	Innsbruck	Klagenfurt	Linz	Vienna	Total Austria
Subscribers' telephones (Hauptanschlüsse)	8,556	16,995	5,316	14,343	138,712	183,922
Of which automatic	7,662	15,579	4,539	13,056	121,038	161,874
Telephone extensions (Nebenanschlüsse)	4,324	12,092	3,225	8,707	72,200	100,548
Public telephones (Öffentliche Sprechstellen)	600	521	437	447	2,833	4,838
Total telephones	13,480	29,608	8,978	23,497	213,745	289,308
Telephones per 100 population	1.20	4.13	2.06	2.30	5.63	4.09

Table VI

TELEPHONE AND TELEGRAPH OFFICES IN AUSTRIA
(31 March 1939)

Postal District	Graz	Innsbruck	Klagenfurt	Linz	Vienna	Total Austria
Telephone offices[a] (Fernsprechämter)	1	2	1	1	3	8
Telegraph offices (Telegraphenämter)	0	0	0	1	1	2
Communal public telephones[b] (Gemeindliche Öffentliche Sprechstellen)	139	506	127	36	308	1,116
Postal offices with telephone facilities	415	381	241	429	962	2,428
Postal offices with telegraph facilities	380	381	117	402	977	2,257
Total offices	935	1,270	486	869	2,251	5,811
Telegraph construction offices (Telegraphenbauämter)	1	1	1	1	5	9

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a. The telegraph offices (Telegraphenämter) have both telegraph and telephone facilities, but the telephone offices (Fernsprechämter) handle only telephone services.

b. Villages (communes) which have only one telephone located in a central office for the use of the entire community.

Table VII
TOTAL LONG-DISTANCE TELEPHONE TRAFFIC IN AUSTRIA
(1 April, 1938 - 31 March, 1939)

Postal District	Long-Distance Calls (in millions)
Graz	1.6
Innsbruck	1.2
Klagenfurt	0.9
Linz	2.2
Vienna	5.8
Total Austria	11.7

Table VIII

TELEGRAPH TRAFFIC IN AUSTRIA
(1 April 1938 - 31 March 1939)

Postal District	Graz	Innsbruck	Klagenfurt	Linz	Vienna	Total Austria
Telegrams (thousands)	299.3	320.5	170.8	377.7	1,955.6	3123.9
Of which thousands:						
to foreign countries	20.1	22.0	17.0	45.1	445.0	549.2
from foreign countries	19.7	23.6	14.8	47.1	516.5	621.7
Registered code addresses (Kurzanschriften)	206	251	45	141	2222	2865

Table IX

POSTAL TRAFFIC IN AUSTRIA
(1 April 1938 through 31 March 1939)

Postal District	Graz	Innsbruck	Klagenfurt	Linz	Vienna	Total Austria
Briefsendungen (millions)	70.2	90.9	30.5	68.3	351.4	611.3
Pieces per inhabitant	63	127	70	67	93	86
Paketsendungen (thousands)	2,058	1,468	739	2,007	9,142	15,414
Insured packages (Wertpakete) (thousands)	53	22	12	39	178	304
Insured letters (Wertbriefsendungen) (thousands)	72	58	36	112	357	635
C.O.D. mail (Nachnahmesendungen) (thousands)	669	473	326	606	1,286	3,360
Newspapers (Zeitungsnummernstücke) (millions)	10.2	11.0	0.2	37.0	97.9	156.3

Table X

POSTAL BUS TRANSPORT IN AUSTRIA
(1 April 1938 - 31 March 1939)

Postal District	Graz	Innsbruck	Klagenfurt	Linz	Vienna	Total Austria
Number of repair shops	1	1	1	1	1	5
Kraftpost lines:						
Number	55	91	32	106	159	443
Total length (km.)	2,184	3,023	1,389	3,326	5,739	15,661
Total number of passengers carried (thousands)	1,452	3,269	1,747	2,278	9,120	17,866

Table XI

POSTAL SAVINGS IN AUSTRIA

Year	No. of depositors	Value of deposits (in million RM)
1938	300,000	100
1941	4,300,000	1,000
1943	11,000,000	5,000

Table XII

POSTAL CHECKING IN AUSTRIA
(31 April 1938 through 31 March 1939)

Postal District	Graz	Innsbruck	Klagenfurt	Linz	Vienna	Total Austria
Number of postal checking depositors	9,874	6,944	3,638	11,151	9,909	41,516
Postal money orders and checks						
Payments into system						
Number (thousands)	5,615	3,376	2,687	6,038	25,698	43,414
Value (millions RM)	305	200	124	318	1,543	2,490
Payments out of system						
Number(thousands)	2,480	1,752	1,093	2,325	9,700	17,350
Value(millions RM)	259	157	101	251	905	1,673